

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, APRIL 30, 1859.

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NEW-YORK:

PUBLISHED WEEKLY, BY

JOHN H. SCHULTZ & CO.

Front Room, Third Floor,

No. 9 Spruce Street.

ROOFING.

FLOORING OF RAILWAY BRIDGES, ETC.

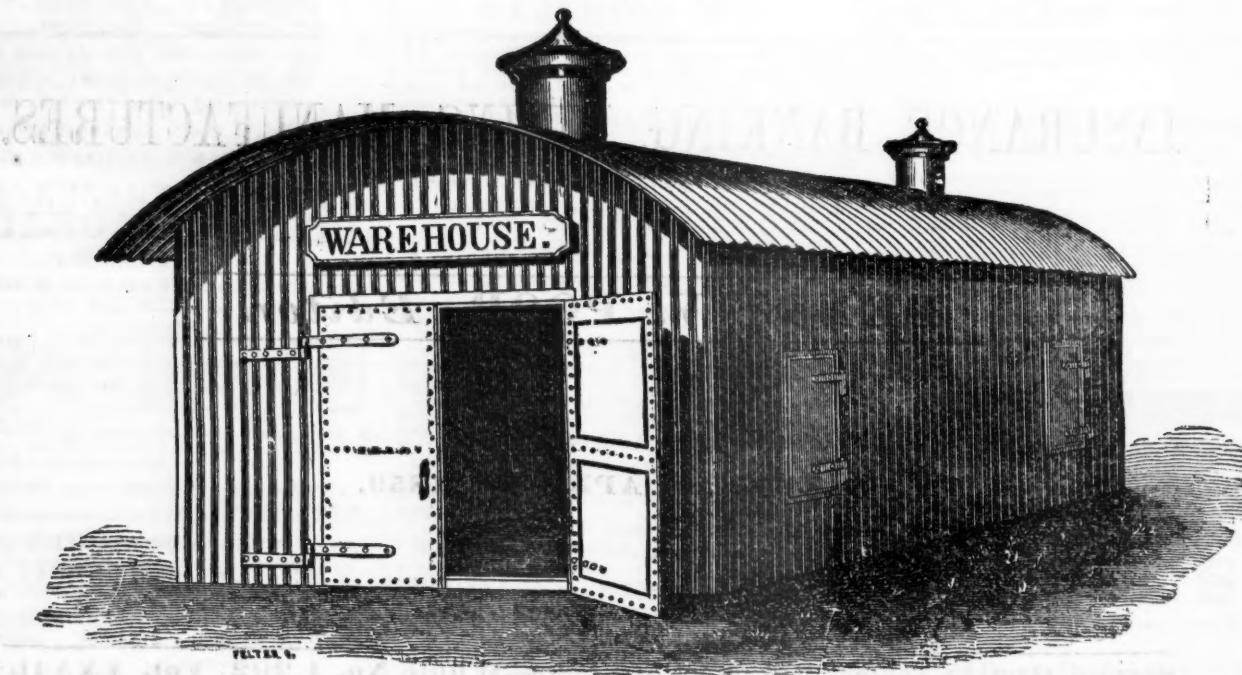
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[WHOLE No. 1,202, VOL. XXXII.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

NEW YORK, SATURDAY, APRIL 30, 1859.

Central Railroad of New Jersey.

The following is a comparison of the receipts, expenses and net earnings of the Central railroad of New Jersey for the fiscal year ending March 31, 1859, with the previous fiscal year:-

| 1859. | 1858. | Increase. |
|------------|-----------|-----------|
| Receipts.. | \$870,953 | \$682,940 |
| Expenses.. | 350,281 | 325,748 |

Netearn's. \$520,672 \$357,192 \$163,480; or 46 per ct.

The following disposition has been made of the net earnings:

| | |
|---|--------------|
| Interest on \$3,000,000 bonds | \$210,000 00 |
| Interest on incomes, notes, &c | 46,672 26 |
| Loss in redeeming \$260,000 income bonds | 20,650 00 |
| Sundry charges for depreciation | 13,499 01 |
| Income bonds towards loss on future purchases | 6,000 00 |
| Taxes to State | 23,854 34 |
| Dividend, ten per cent. | 200,000 00 |
| Total | \$520,675 61 |

This dividend, which has been made in stock, represents that amount of the net earnings applied to the redemption of the income bonds, estimating them at the rate at which they were issued.

Montgomery and West Point Railroad.

The annual meeting of the stockholders in this road was held at Montgomery, Ala., on the 12th inst., at which the old board of directors were unanimously re-elected. At this meeting a resolution was passed agreeing to endorse, in connection with the railroad companies east, the bonds of such roads west of Montgomery as are necessary to fill the gaps between that point and Vicksburg, and to the extent necessary to insure the completion of those roads.

The annual report of the company for the fiscal year ending February 28th, 1859, was presented. From this we learn that the receipts during that time were:

| | |
|------------------------------|--------------|
| From passengers | \$235,271 79 |
| " freight | 179,829 92 |
| " mail | 31,052 30 |
| Total | \$446,153 92 |
| And the expenses were— | |
| Maintenance of road | \$80,170 23 |
| Do. equipment 80,302 72 | |
| Operating road | 51,974 52 |
| Incidental | 21,825 00 |
| | \$234,272 47 |
| Interest paid on loans | 65,050 68 |
| | 302,323 15 |

Leaving a net income of.... \$143,830 77—a fraction over 10 per cent. on the capital stock of the Company paid in, amounting to \$1,419,672; out of which has been declared two semi-annual dividends of three dollars per share, amounting to \$86,302 46; leaving a surplus to the credit of Reserved Fund of \$57,528 31.

A comparison of the earnings of the past with those of the preceding year, shows a gratifying increase in each department. The total increase being \$55,269 87.

Since the completion of the road the business has steadily increased, as will be seen by the following statement:

| | | | |
|------------|--------------|------------|--------------|
| 1854 | \$230,046 65 | 1857 | \$385,723 53 |
| 1855 | 249,628 69 | 1858 | 390,884 05 |
| 1856 | 332,873 91 | 1859 | 446,153 92 |

The trains have been run with unusual regularity and freedom from accident or serious detention, and during a period of four months, not a single mail train failed to make its regular connection with the adjoining roads.

There have been carried over the road during the year, 104,094 passengers, none of whom have received the slightest injury; and the loss and damage to freight, and property of all kinds transported, has been but \$887 94, *being less than one fifth of one per cent.* of gross receipts.

The condition of the road and outfit in every department has been as rapidly improved and increased as the means of the company would warrant. Within the past four years, trestle work has been replaced by permanent earth work, and substantial stone culverts and abutments have been constructed wherever it could be done to advantage. Of the 48 miles of flat bar iron then in use but five miles now remain, which will be replaced with T rail by the 1st of October next.

The equipment of the road consists of 20 engines; 12 first class, 2 second class, 10 baggage and mail, and 262 freight and construction cars: to which four locomotives and fifty freight cars will be added during the present year.

GENERAL STATEMENT.

| | |
|---------------------------------------|----------------|
| Capital stock | \$1,419,672 00 |
| Due State of Alabama | 122,821 77 |
| Coupon bonds due May 1, 1860 | \$100,000 |
| Coupon bonds due May 1, 1863 | 150,000 |
| Coupon bonds due May 1, 1865 | 100,000 |
| Coupon bonds due July 1, 1866 | 450,000 |
| | 800,000 00 |
| Due on open account | 18,956 90 |
| Net earnings for 1858-9. \$143,830 77 | |
| Less div. Nov. 1, 1858. 42,588 72 | |
| | 101,242 05 |

| | |
|--|----------------|
| Cost of road—including bridge over the Chattahoochee | \$1,819,408 21 |
| Cost of engines and cars | 279,435 00 |
| “ shops and tools | 49,050 36 |
| Real estate and depot buildings | 47,704 61 |
| Wood etc., on hand | 5,588 30 |
| Ala. and Florida railroad stock | 100,000 00 |
| Negroes, etc. | 59,306 86 |
| Cash and cash items | 102,056 39 |

\$2,462,492 72

OFFICERS.

C. T. POLLARD, *President.*

W. H. POLLARD, *Treasurer.*

DANIEL H. CRAM, *Superintendent.*

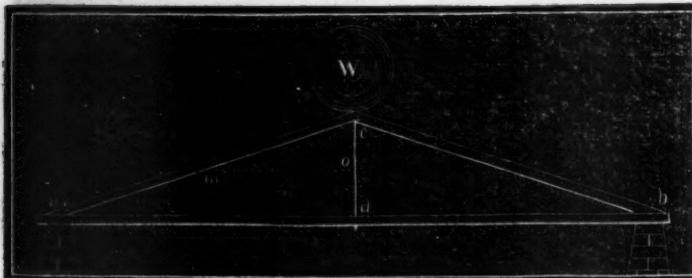
**TREATISE
ON THE
PRINCIPLES OF CIVIL ENGINEERING
AS APPLIED TO THE
CONSTRUCTION OF WOODEN BRIDGES.**

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R.R.

(Continued from p. 261.)

§ 79. When the beam is not a solid one, but a combination, like a bridge truss, of parts acted upon only by thrust or tensile strains, the directions of those strains are coincident with the direction of the fibre of the timber, and considerable modifications, in the application of the foregoing principles, will sometimes be necessary.

Fig. 37.

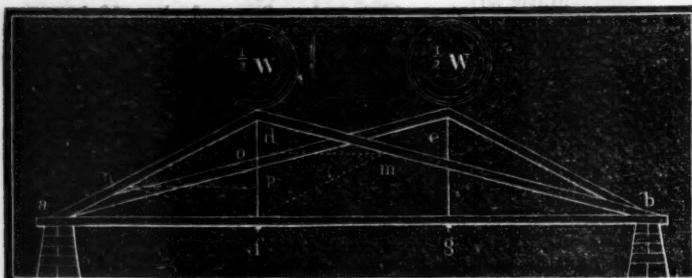


pp. This is one of the simplest forms of truss in use. The weight (W) is applied at the middle, and is sustained equally by the abutments (a and b). It acts, also, obliquely through the braces (ac and bc), giving rise to horizontal forces which are counteracted by the tie or chord (ab).

Suppose the height of truss 1 yard, and span, 6 yards. The length of the rafters or braces (ac and bc) $\sqrt{3^2+1^2}=3.162$ yards, and the weight (W) 1,000 lbs.

The oblique thrust of the braces will then be $cd : cm :: W : \text{thrust}$; or, $1 : 1.581 :: 1,000 : 1,581$ lbs. The tension upon the chord (ab) will be $cd : cm :: W : \text{tension}$; or, $1 : 1.5 :: 1,000 : 1,500$ lbs.

Fig. 38.



qq. Fig. 38 is another form of truss, of the same span and height as the last, but composed of two pairs of rafters or braces, of unequal lengths, arranged for the support of equal weights, at one-third the distance from each abutment;

Now, of the weight applied at d, two-thirds are sustained at a, and one-third at b; for $dp = df$, and $do = df$. Consequently, if the weight at d be 1,000 lbs., the brace ad will be subject to a vertical pressure of 666½ lbs., and the brace bd to a vertical pressure of 333½ lbs.

The length of the brace ad will be $\sqrt{2^2+1^2}=2.236$ and of the brace bd $\sqrt{4^2+1^2}=4.123$. The oblique strains upon the braces will then be,

$$1 : 2.236 :: 666\frac{1}{2} : 1,490\frac{1}{2} \text{ lbs. on } ad, \text{ and}$$

$$1 : 4.123 :: 333\frac{1}{2} : 1,374\frac{1}{2} \text{ lbs. on } bd.$$

The tension upon the chord (ab) will be,

$$dp : pn :: df : fa :: 1 : 2 :: 666\frac{1}{2} : 1,333\frac{1}{2} \text{ lbs. or,}$$

$$do : om :: df : fb :: 1 : 4 :: 333\frac{1}{2} : 1,333\frac{1}{2} \text{ lbs.}$$

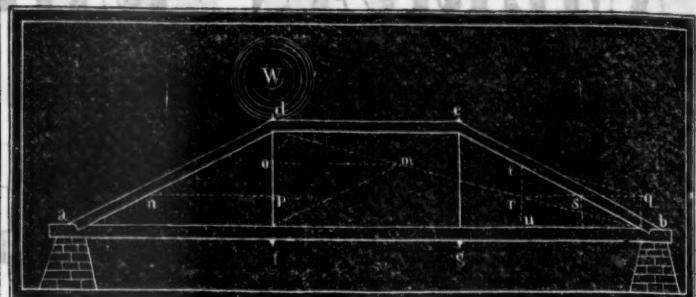
rr. In the other example, (pp. Fig. 37), where the weight was applied at the centre, the tension was found to be 1,500 lbs. These tensions are therefore, as the rectangles of their respective segments, (§ 78), that is:

$$3 \times 3 : 4 \times 2 :: 1,500 : 1,333\frac{1}{2}.$$

ss. Placing another weight of 1,000 lbs. at e, an additional tension of

1,333½ lbs. will be produced, making a total horizontal strain, upon the whole length of the chord (ab), of 2,666½ lbs.

Fig. 39.



tt. Fig. 39 is a truss of the same length and height as in the last two cases, but has a straining beam (de), one-third the span in length, instead of the two longer braces (ae and bd, Fig. 38).

If at d, one-third of the span from a, a weight of 1,000 lbs. be applied, $\frac{1}{3}$ of that weight (§ 77) will be sustained at a and $\frac{2}{3}$ at b. The strains, to which the brace ad will be subjected, are, vertical 666½ lbs., oblique 1,490½ lbs., and horizontal 1,333½ lbs., precisely as in Fig. 38.

This horizontal thrust acts, equally, upon the chord in the direction ba, and upon the straining beam in the direction de.

The vertical and horizontal pressures are to each other, as $dp : pn$, and $do : om$, but, $do : om :: df : fb$; and $do : dm :: df : db$.

Thus the resultant, of the vertical and horizontal forces on this side of the weight, is represented in force and direction by dm , and, also, in direction by db .

One-third of the weight at d will, therefore, act upon the abutment b, through the intervention of the straining-beam and braces with the same vertical and horizontal forces, as it would through a straight brace from d to b, as in Fig. 38, for $do : dm :: 1 : \sqrt{4^2+1^2} = \sqrt{17} = 4.123 :: 333\frac{1}{2} : 1,374$.

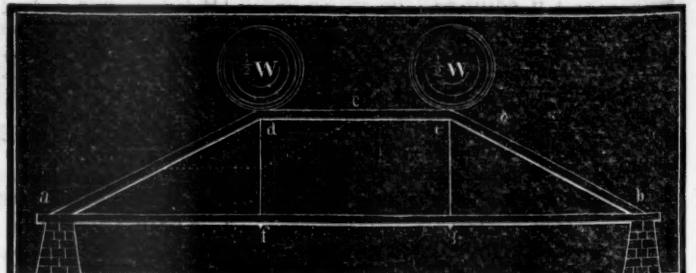
The brace be is resisted at b by a vertical pressure $bg = ru = do = 333\frac{1}{2}$ lbs.; and by a horizontal pressure $bu = om = 1,333\frac{1}{2}$ lbs., the resultant of which is $br = dm = 1,374\frac{1}{2}$ lbs. Resolving this force again, into those of de and eb ,

$$bd : br :: de : rs, \text{ and } bd : br :: be : bs, \text{ and}$$

$$br : bt :: 4.123 : 4.472 :: 1,374\frac{1}{2} : 1,490\frac{1}{2} = bt;$$

but $bs : bt = 745\frac{1}{2}$, therefore the oblique thrust of the brace be is one-half that of ad.

Fig. 40.



uu. This truss is in every respect like the last one, but with two equal weights applied at equal distances from the middle, as in Fig. 38. The horizontal strain upon the chord, as the effect of 1,000 lbs. vertical pressure at d, was 1,333½ lbs. It may, at first, seem reasonable to conclude that the effect of another weight of 1,000 lbs. applied at e, will be the same, and that the joint effect of the two vertical pressures, will be a horizontal strain of 2,666½ lbs. This, however, is not the result.

By substituting the straining-beam (de) in place of the long braces in Fig. 38, the whole vertical force acts upon the short braces and at a greater angle with the horizon, than when divided between the braces of unequal length.

In Fig. 38, two-thirds of the weight act upon the braces under an inclination of 1 : 2, and one-third of the weight acts under an inclination of 1 : 4. Their horizontal results sum up 2,666½ lbs., that is, $1 : 2 :: 666\frac{1}{2} : 1,333\frac{1}{2}$ and $1 : 4 :: 333\frac{1}{2} : 1,333\frac{1}{2}$.

But in the present case (Fig. 40), the whole weight acts upon the braces under an inclination of 1 : 2.

With 1,000 lbs. at d the vertical pressure at a was $666\frac{2}{3}$ lbs., and at b $333\frac{1}{3}$ lbs. Putting the other weight of 1,000 lbs. at e , the pressure at a will be increased $333\frac{1}{3}$ lbs. and at b $666\frac{2}{3}$ lbs., so that the two weights will counter-balance each other. The vertical pressure, at each of the points a and b , will be 1,000 lbs., and the same at d and e . Then

$$df : af :: 1 : 2 :: 1,000 : 2,000 \text{ lbs.}$$

Therefore, the horizontal thrust of the brace (ad), the tension upon the chord (ab), and the crushing tendency upon the straining-beam (de) will be equal to 2,000 lbs.

Again. The weights are applied at one-third the distance from the middle of the truss, and act upon the middle point with two-thirds their vertical force, or $1,333\frac{1}{3}$ lbs. Then

$$1 : 3 :: \frac{1,333\frac{1}{3}}{2} : 2,000 \text{ lbs. That is}$$

the height of truss : $\frac{1}{3}$ the span :: $\frac{1}{2}$ weight at middle : horizontal strain.

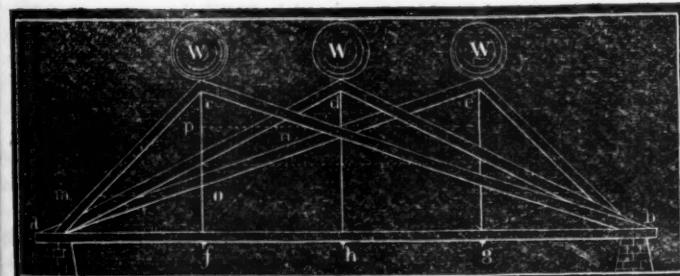
vv. If the whole weight (2,000 lbs.) had been applied at the middle, the horizontal strain would have been $1 : 3 :: \frac{2,000}{2} : 3,000$ lbs.; and if the

whole weight had been evenly distributed, from one end to the other of the truss, the horizontal effect would have been the same as would be produced by 1,000 lbs. applied at the middle, (§ 28); or, $1 : 3 :: \frac{1,000}{2} : 1,500$ lbs.

Now, $1,500 : 1,333\frac{1}{3} :: 3 \times 3 : 2 \times 4$, that is, the horizontal effect produced by a weight uniformly distributed, is to that of one-half the same weight applied at one point, as the square of one half the span, is to the rectangle of the two segments of the span.

Different forms of truss for the support of three cross beams, or of weights applied at three equi-distant points, are represented by *Fig. 41, 42* and 43.

Fig. 41.



ww. The height of this truss is $\frac{1}{3}$ its span. Constructing the parallelogram of forces, the strains upon its several parts are found to be as follows:

The weight at d , upon the central pair of braces, is equally divided between the two. The vertical pressure upon each is, therefore, $\frac{1}{2}W$. The oblique thrust is

$$1 : \sqrt{2^2 + 1^2} = \sqrt{5} = 2.236 : \frac{1}{2}W : 1.118W.$$

The horizontal strain is $1 : 2 : \frac{1}{2}W : W$.

Putting the weight $W=1,000$ lbs., these strains will be 1,118 lbs. oblique, and 1,000 lbs. horizontal.

The weight at c , upon the braces ac , be is divided between the two, unequally, for

$$cf : co :: 1 : \frac{1}{2}, \text{ and } of : cp :: 1 : \frac{1}{2}. \text{ Then}$$

$$1 : \frac{1}{2} : W : \frac{1}{2}W = \text{vertical pressure on brace } ac, \text{ and}$$

$$1 : \frac{1}{2} : W : \frac{1}{2}W = \text{vertical pressure on brace } be.$$

The lengths of these rafters are :

$$\sqrt{1^2 + 1^2} = \sqrt{2} = 1.414 = \text{length of brace } ac.$$

$$\sqrt{3^2 + 1^2} = \sqrt{10} = 3.162 = \text{length of brace } be.$$

Their oblique strains are :

$$1 : 1.414 : \frac{1}{2}W : 1.0605W = \text{thrust of } ca,$$

$$1 : 3.162 : \frac{1}{2}W : 0.7905W = \text{thrust of } cb,$$

and the horizontal strain is,

$$cf : pn :: 1 : \frac{1}{2}, \text{ or as } cf : pn :: 1 : \frac{1}{2}, \text{ and}$$

$$1 : \frac{1}{2} : W : \frac{1}{2}W = \text{tension on } ab.$$

Putting $W=1,000$ lbs., then the strains will be—

$$1,060\frac{1}{2} \text{ lbs. oblique thrust of } ca,$$

$$790\frac{1}{2} \text{ " " " " } cb,$$

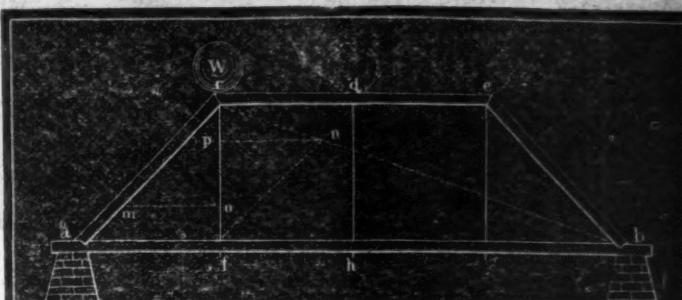
$$750 \text{ " tension on } ab.$$

The horizontal effect of the weight at d is to the horizontal effect of the weight at c as the rectangle of the segments ah , hb to the rectangle of the segments af , fb , for $2 \times 2 : 3 \times 1 :: 4 : 3 :: 1,000 : 750$.

Applying the third weight of 1,000 lbs. at e , the sum of the horizontal strains upon the chord ab will be—

$$\frac{1}{2}W + W + \frac{1}{2}W = 2\frac{1}{2}W; \text{ or, } 750 + 1,000 + 750 = 2,500 \text{ lbs.}$$

Fig. 42.



xx. This truss is of the same length and height as the last; but consists of a straining beam half the span in length, and two braces of the length of the shortest in *Fig. 41*, instead of the three pairs of braces. Also, the tie-beams or chord common to both trusses.

First, place a single weight at c and construct the parallelogram of forces $acdf$, making $co = cf$, to represent the vertical pressure at a , and $cp = cf$, the vertical pressure at b . The horizontal thrust of the brace ac , will be $\frac{1}{2}W$, for $cf : cm :: 1 : \frac{1}{2}$, and $1 : \frac{1}{2} :: W : \frac{1}{2}W$, as in *Fig. 41*.

The horizontal pressure in the direction ce is $pn = om$, and cp is the vertical pressure on that side of c . The resultant of these two pressures is cm and acts in the direction cb .

The oblique thrust of the brace ac is—

$$cf : co :: 1 : \frac{1}{2} :: ca : cm :: \sqrt{2} = 1.414 : 1.0605 :: 1.414W : 1.0605W.$$

Similarly it may be shown that the oblique thrust of the brace be is $0.3535W = \frac{1}{2}$ of the thrust of ac .

Putting the weight W equal 1,000 lbs., the thrust in the direction of the brace ac will be 1,060.5 lb., of the brace be 353.5 lbs., and the tension upon the chord 750 lbs.

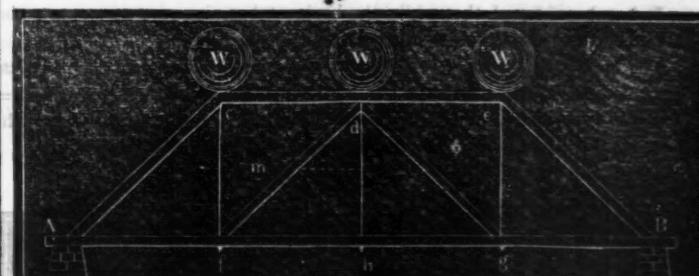
At e place another weight of 1,000 lbs., and the two weights will counter-balance each other. The weight at e will be wholly supported by the brace ac , and the weight at c will be sustained by the brace bc .

Each brace will be subjected to an oblique strain of $1,060.5 \text{ lbs.} + 353.5 = 1,414 \text{ lbs.} = 1,000 \text{ lbs.} \times \sqrt{2}$, and to a horizontal thrust of 1,000 lbs., for $1 : 1 :: W : W :: 1,000 : 1,000$.

A third weight of 1,000 lbs. at d , will depend for its support upon the stiffness of the straining-beam, one-half bearing at e , and one-half at c .

The vertical action upon each brace will be increased to $1.5W = 1,500$ lbs.; their oblique thrusts $1.5W \times 1.414 = 2,121$ lbs., and their horizontal thrusts to $1.5W = 1,500$ lbs.

Fig. 43.



yy. For the purpose of relieving the top chord from a transverse strain, and of transferring the vertical effect of a weight at d , to the extremities of the top chord (ce), it is usual to insert the intermediate braces df , dg .

By means of these, one-half the vertical pressure at d is transmitted to g , and thence by the tension of the vertical tie (eg) to e . The other half of the pressure is in like manner transmitted to f , and thence to c .

The oblique strains upon these central braces will be $\frac{1}{2}W \times 1.414 = 0.707W = 707$ lbs., or exactly $\frac{1}{2}$ of the strain upon the end braces.

The horizontal strain on the bottom chord will be—
 Between *a* and *i* and between *b* and *k*, 42,857 lbs.
 " *i* " *l* " " *k* " *m*, 65,079 "
 " *l* " *m* 75,079 "

The oblique thrusts of the braces will be—

$$1 : \sqrt{2} = 1.414 : 10,000 : 14,140 \text{ lbs.}$$

$$.9 : \sqrt{(1^2 + .9^2)} = 1.345 : 20,000 : 26,900 \text{ lbs.}$$

$$.7 : \sqrt{(1^2 + .7^2)} = 1.220 : 30,000 : 36,600 "$$

(To be continued.)

Hannibal and St. Joseph Railroad.

This road commences at Hannibal, Mo., on the west bank of the Mississippi river, a few miles south of Quincy, Ill., and runs thence, via Palmyra and Hudson, to St. Joseph, on the Missouri river. At its eastern terminus a connection is formed with the Quincy and Chicago line by a steamer between Hannibal and Quincy. Upon the completion of the Quincy and Palmyra railroad, a still more direct route will be obtained, as the river terminus of the latter road will be directly opposite that of the Chicago line. The Mississippi terminus of the Peoria and Hannibal railroad, and the Great Western railroad of Illinois is directly opposite Hannibal. Upon the completion of these roads, a connection will be made through the former, with the Peoria and Oquawka, and the Bureau Valley and Rock Island roads; and through the latter with the Toledo and Western road to Toledo, the main line and branch of the Illinois Central, the Lafayette and Indianapolis, Pittsburg, Fort Wayne and Chicago, etc., etc. A direct connection is also made at Hudson with the North Missouri road, running thence to St. Louis; and at St. Joseph with steamers, for Kansas City, Council Bluffs, Nebraska City, Leavenworth, Leavenworth, etc.

In the report of this company made to the Board of Public Works of Missouri in December last, the total length of the road is given at 206.8 miles. The higher gradients on the road reach 80, 90, 100, 110 and 122 feet per mile; the grade of 122 feet extends over .05 of a mile.

The capital stock authorized by the charter is 50,000 shares of \$100 each. The whole amount taken is 19,630 shares—upon which there has been paid in cash upon 10,980 shares, \$336,061 20; in county bonds \$82,000; 3,510 shares have been issued to contractors, and 3,140 shares to the Fiscal agency to be applied in settlement with the contractors—leaving to be paid, when assessed and called for, \$879,938 80.

The lands granted by Congress to the State of Missouri to aid in the construction of this road amount to about 600,000 acres. These lands have been mortgaged to secure the payment of bonds to the amount of \$5,000,000. These bonds are dated April 1, 1856, and are payable July 1, 1881, bearing 7 per cent. interest, payable semi-annually. These bonds were sold at a discount of \$1,640,000—the whole net proceeds being \$3,351,000. The interest to be paid by the company on these bonds is \$350,000 per annum.

The company has also authorized a further issue of its own bonds to the amount of \$1,500,000, secured by a second mortgage upon these lands, dated July 1, 1858, and upon the road and its appurtenances. Of these bonds, 757 have been issued, of which 447 have been sold, netting to the company \$268,200—the discount being \$178,800. The balance is to be applied in settlement with the contractors.

The whole number of State bonds authorized and issued to this company is 3,000—upon which the discount and commissions amount to \$567,301.94, the whole amount of net proceeds being \$2,432,698 06.

RECAPITULATION

| | |
|----------------------------------|--------------|
| Cash paid on stock subscriptions | \$336,061 20 |
| “ proceeds of land bonds | 3,351,000 00 |
| “ convertible bonds | 268,200 00 |
| “ State bonds | 2,432,698 06 |

\$6,387,959 26

| | |
|------------------------------------|--------------|
| Discount, commission and exchange— | |
| On State bonds | \$567,301 94 |
| On land bonds | 1,649,000 00 |
| On convertible bonds | 178,800 00 |

\$2,395,101 94

| | |
|-------------------------------------|----------------|
| Whole number of shares taken 19,630 | \$1,963,000 00 |
|-------------------------------------|----------------|

| | |
|------------------------------|--------------|
| Received in cash upon 10,980 | \$336,061 20 |
|------------------------------|--------------|

| | |
|----------------------------|-----------|
| In county bonds upon 2,000 | 82,000 00 |
|----------------------------|-----------|

| | |
|-----------------------------|------------|
| Issued to contractors 3,510 | 351,000 00 |
|-----------------------------|------------|

| | |
|-------------------------------|------------|
| Issued to Fiscal agency 3,140 | 314,000 00 |
|-------------------------------|------------|

\$1,083,061 20

| | |
|--------------------|--------------|
| Amount uncollected | \$879,938 80 |
|--------------------|--------------|

| | |
|-------------------------------|--------------|
| Interest on 3,000 State bonds | \$180,000 00 |
|-------------------------------|--------------|

| | |
|--------------------|------------|
| “ 5,000 land bonds | 350,000 00 |
|--------------------|------------|

| | |
|-------------------------|-----------|
| “ 447 convertible bonds | 31,290 00 |
|-------------------------|-----------|

| | |
|------------------|--------|
| “ 11 plain bonds | 770 00 |
|------------------|--------|

| | |
|---------------------------------------|-----------|
| State sinking fund on 20 years' bonds | 37,500 00 |
|---------------------------------------|-----------|

| | |
|--------------|-----------|
| “ “ “ 30 “ “ | 22,500 00 |
|--------------|-----------|

\$622,060 00

GENERAL STATEMENT.

| | |
|------------------------------|----------------|
| Receipts: | |
| From stockholders | \$1,083,061 20 |
| “ State of Missouri in bonds | 3,000,000 00 |
| “ company mortgage bonds | 3,550,000 00 |
| “ plain bonds | 11,000 00 |
| “ operating account | 14,679 98 |
| “ land, rents, damages, etc | 964 10 |

\$7,659,705 28

| | |
|-------------------------------------|--------------|
| Expenditures: | |
| For engineering | \$177,513 94 |
| “ interest, discount, exchange, etc | 2,006,260 45 |
| “ depot grounds | 42,255 06 |
| “ land department | 43,007 44 |
| “ construction | 4,209,092 58 |
| “ depot building | 90,102 04 |
| “ sinking fund on State bonds | 1,900 00 |
| “ fencing | 6,271 41 |
| “ right of way, land damages, etc | 54,061 55 |
| “ equipment | 291,312 83 |
| “ expenses and contingencies | 244,144 87 |
| County bonds in treasury | \$20,000 00 |
| Cash in treasury | 109,780 23 |
| Balance Fiscal agency account | 357,093 76 |
| Balance contractors | 6,939 12 |

493,813 11

\$7,659,705 28

OFFICERS.

J. W. BROOKS, Chairman of the board, and of the fiscal agency.

R. S. WATSON, Treasurer of the fiscal agency.
C. D. APPLETON, Secretary of the fiscal agency, and clerk of the board.

J. L. LATHROP, Secretary and Treasurer of the company.

JOSIAH HUNT, Chief Engineer, and Auditor.

J. T. K. HAYWOOD, General agent of the Company, and commissioner of land department.

W. M. CARSON, Secretary of the land department.

Memphis and Charleston Railroad.

The Memphis *Appeal* furnishes the following in relation to this road and its Southern and Eastern connections:

The road has contracted for eleven new locomotives, twelve first class and five second class passenger cars, four baggage and mail cars, and eight through baggage-cars, all of which are now coming on the road, preparatory to running the double daily train on the 1st of July next. The most approved eight-sleeping cars have been contracted for, and will be delivered and put on the road on the 1st of July next. The company have already commenced letting out permanent stone culverts, and filling in their trestle-work, in order that the road shall finally be a solid road-bed from one end to the other, and capable of as high a rate of speed as is obtained on any first-class road in this or any other country.

On and after the 1st of June next two daily trains will leave this city on this road. Arrangements have been perfected to put on a double daily train upon the Great Southern mail line between New Orleans and New York, via Grand Junction and the Memphis and Charleston railroad, through East Tennessee and Virginia, on the first day of June next, without fail. The convention of the line meets at Chattanooga, May 2, to perfect the schedule for this purpose. The Cleveland branch will be finished by or before that time, taking out one stop, reducing the distance twenty-eight miles, and saving several hours' time. The Mississippi Central is now laying track rapidly, and will every week reduce the staging till the connection is closed between Grand Junction and New Orleans, which will be done certainly by November or December next. By the same time it is confidently believed that the Orange and Alexandria road will be completed from Charlottesville to Lynchburg, thereby saving one hundred and twenty miles more line and three changes. The finishing of these cut-offs, which will be done this year, completes the great Southern mail-line between New Orleans, Memphis and New York, Philadelphia, Baltimore, Washington, Richmond, Charleston, and the entire Atlantic seaboard, by the shortest and most practicable route that a line of road of its length can ever be built. This line will then be reduced to the following distances and time, and will defy all competition, say:

| | Miles. |
|-------------------------------|--------|
| New Orleans to Grand Junction | 194 |
| Grand Junction to Chattanooga | 257 |
| Chattanooga to Bristol | 240 |
| Bristol to Lynchburg | 204 |
| Lynchburg to Washington | 174 |

Total 1,259

Making the distance from New Orleans to Washington city only 1,269 miles, which, at twenty miles per hour, (certainly moderate speed for good roads,) will only require *sixty-four hours!* The distance between Memphis and Washington will be reduced to 929 miles, which, at the same rate per mile, will be run in less than forty-eight hours.

The earnings of the Memphis and Charleston road for the month of March were as follows:—From passengers, \$58,318; freight, \$42,657; express, \$1,651; mails, \$4,597; total, \$107,225. The expenses for the month were \$45,000, leaving a net profit of \$62,217. This shows an increase on the business of the road for the last nine months, from July 1 to April 1, of \$1,015,000, and a net profit of \$660,000—a handsome show for a road costing with its equipments less than \$6,500,000.

Memphis, Clarksville and Louisville R. R.

We learn from the Memphis *Avalanche*, that track laying has been commenced on this road between Clarksville and the tunnel. The iron has been laid down five miles south of Bowling Green, and by the 1st of October the calculation is that the rails will meet at the tunnel, with the exception of which the entire track through will be completed.

*Journal of Railroad Law.***LIABILITY OF RAILROAD COMPANY FOR CONSEQUENCES OF STRIKE AMONG ITS EMPLOYEES.**

About the 19th of June 1854, one Blackstock delivered a quantity of potatoes to the New York and Erie Railroad Company, at Hornellsville and vicinity, to be carried to New York. The potatoes were not delivered at New York until about the 10th of July following. They were then found to be decayed and rotten, resulting from their having been kept too long during hot weather in the packages in which they were put up to be forwarded. In the usual course of business on the line of the New York and Erie railroad they would have gone through in three or four days, instead of which they were detained eighteen or twenty.

Blackstock sued the company for the damages thus sustained. In defence they showed that the delay was owing to a strike on the part of the engineers, and their refusal, for a period of about two weeks, to work. It appeared that the company had adopted a new rule for the management of the road, which was beneficial and salutary in its operation as respects the public, but gave offence to the engineers employed on the road, so much so that one hundred and forty out of one hundred and sixty-eight engineers in the employment of the company, stopped work, and thus for about a fortnight the regular running of the trains was prevented. The defendants did all in their power to resume running as soon as possible.

The New York Superior Court before which the cause was argued on appeal, held this was not a defence to the action, but the company were liable for their failure to carry the potatoes promptly. The following is an abstract of the reasons assigned by the court.

WOODRUFF J.—after citing and explaining some authorities to the general rule, that in respect to the time of delivering goods a common carrier is only bound to use due diligence; and is not liable for delays occurring without his fault.

The liability of the master for a neglect of duty by the servant exists independently of the question whether there is any fault in the master himself. True, the master is sometimes held liable for the employment of an improper or unskillful servant, but he is often liable when no blame attaches to himself personally. And, for the same reason, he may not excuse himself for a failure to perform a duty which he owes to third persons, by showing that his servant, who was charged with its performance, neglected or refused to do it. The master, assuming to perform the duty, assumed also the hazard of the competency and fidelity of the servants whom he employs.

The same rule must be applied to corporations. Their operations are, necessarily, conducted by the instrumentality of agents, and to say that the want of fidelity on the part of their servants excuses them from the performance of any duty which they owe to third persons, would be practically, to exempt them from any negligence, or any misfeasance, which was not the immediate or necessary consequence of a corporate act.

The present case is, undoubtedly, one of some hardship. It cannot, for a moment, be claimed that a combination, resulting in a refusal to work, by one hundred and forty out of one hundred and sixty-eight men of skill, whose services were indispensable to the conduct of the defendants business, ought to have been foreseen, when there was

no just cause for such a refusal: and it was probably impossible by any ordinary means to have supplied their places on the day on which their refusal took effect; indeed, on so short a notice as the defendants received, it may be regarded as quite impossible. Nevertheless we must regard the hazard of such an occurrence as resting upon the employers. They alone had it in their power to secure, by proper contracts, indemnity against the consequences of misconduct by the employee. The owner of goods has no control, or right of interference in the matter, and we perceive no ground on which to relieve the defendants from the hazard to which the nature of their business, and the vast extent to which it involves the employment of assistants, necessarily subject them. And although they are, in a degree, placed within the power of extensive combinations among their servants, that, we think, furnishes no legal reasons for visiting the consequence upon third persons. Practically, the defendants in such circumstances may suffer by the misconduct of their servants, without redress, but the law imposes no such hardships, on the contrary it will hold the unfaithful servant liable for the direct and immediate consequences of his own fault, and this will, so far as the law can do so, give to the master indemnity.

It ought not to be doubted, and probably would not be doubted, that if, by the negligence of a single engineer in charge of a train, or by his perverse refusal to perform his duty, his train was unnecessarily detained, the company would be liable for the delay. When the delay is said to be excused if it happen without their "fault," the term is not used as imputing personal blame, but it means without fault on their part, in their servants or otherwise.

If this be so it is difficult to perceive how, in principle the rule of liability is affected by increasing the number of servants who are guilty.

An individual carrier may be so conducting his business, that it is only necessary for him to employ one servant to drive one of his wagons; suppose that servant, when at a distance on his journey, abandons the wagon, and days elapse before the carrier hears of its non-arrival, or learns the cause. In such case, assuming that there was no want of care or judgment in selecting his servant, the delay was as to the master personally, without his fault, and in a sense unavoidable, and yet he cannot be held excused. The fidelity of the servant was at his risk,—the fault of his servant is, in a legal sense, his fault.

We cannot think the rule would be otherwise if his business require him to employ a hundred servants, and they all prove unfaithful; such a case is, of course extraordinary, and may create a hardship, but we do not perceive that any new rule is to be prescribed for that reason. If it may be, what number of servants must combine to call for its application? No answer to this question suggest itself to our minds.

We apprehend the rule then to be that the causes of delay, which will excuse a carrier from the performance of his duty to carry within the usual or ordinary period required for the transportation he undertakes, must be those only which occur without his fault, or the fault of his agents, servants or employees.

And a hinderance caused by the tortious act of

third persons, over whom the carrier has no control, and to whom he stands in no relation involving responsibility for their acts or defaults, will excuse his delay, according to the cases above referred to. Unless then the defendants were in the present case hindered in transporting the goods, without their fault, or that of their agents, or servants, they are liable in this action.

Their answer in terms avers that the delay was caused by the wrong refusal of their engineers, agents and employees, to perform their duty, or to obey the defendants just and necessary rules, etc. And the referee has found that the delay was occasioned by a strike of the defendants engineers, and their refusal to work.

If the views above expressed are correct, and we do not doubt that they are, then upon this finding, and this statement in the answer, the defendants are liable.

Ashtabula and New Lisbon Railroad.

We learn from the *Youngstown Register*, that the Board of directors of this company, recently in session at Canfield, Ohio, have decided to resume the prosecution of the work, from that place to the Pittsburg, Fort Wayne and Chicago road immediately, and finish the grading and have the road-bed ready for the iron by fall; and to have it ironed and in running order as soon thereafter as it can be done. A resolution was passed to apply all the stock subscribed in Canfield and Greene townships to accomplish the grading, and there is probably enough subscribed to do it, if it shall all be promptly paid up. Arrangements, we understand, are in progress, to obtain the iron, and have it in readiness as soon as the grading is finished. Efforts will also be made to construct the road north to Niles as rapidly as possible.

Weston and Atchison Railroad.

The *St. Louis Republican* states that a company was organized a few weeks since, under the general railroad law, styled "The Weston and Atchison railroad company," for the purpose of building a road on the most direct route connecting with the Atchison and St. Joseph road.

Pennsylvania Central Railroad.

The Board of directors of this road have declared a dividend of three per cent. on the capital stock of the company, clear of State tax, payable on and after the 15th of May next.

Railway Premium for a Steam Plow.

There being already, at the discretion of the Agricultural Society of Illinois, a premium of \$3,000 for the best practical and acceptable Steam Plow, the Executive committee of the Illinois Central railroad have added \$1,500 more, as follows:

Resolved, That the Central Railroad company offer \$1,500 as a premium for the best steam engine for plowing and other farm work; the simplicity and economy of its construction, and its practicability of application to farm uses shall be such that it can successfully compete with animal power for farm purposes; the award to be made by the Executive committee of the State Agricultural Society, in connection with three scientific machinists to be selected by that body. Before any party shall claim the payment of said award, he shall exhibit the practical working of said engine at three points on the line of the Illinois Central railroad, to be designated by the Vice President of the company; the said company agreeing to transport said engine to or from such points, free of expense to said party.

Railroad Bonds.

| NAMES OF COMPANIES. (The following quotations are as of interest.) | Amount of Loan. | Description of Bonds. | Rate Int. | Interest pay- able. | Where payable. | Due. | Offered. | Asked. |
|--|--------------------|------------------------------------|-----------|------------------------|-------------------|------|----------|--------|
| Alabama and Tennessee River | \$338,000 | 1st mortgage, convertible | 7 | 1st Jan., 1st July | N. Y. | 1872 | 85 | 85 |
| Buffalo and State Line | 500,000 | Do. convertible | 7 | April, October | 1866 | 90 | 96 | 96 |
| Bellefontaine and Indiana | 600,000 | Do. convertible | 7 | Jan'y, July | 1866 | 75 | 75 | 75 |
| Do. do. | 200,000 | Real estate, convertible | 7 | Jan'y, July | 1858 | — | — | — |
| Do. do. | 200,000 | Income, guar. Cl. Col. & Cin. | 7 | Feby., August | 1859 | — | — | — |
| Central Ohio | 1,250,000 | 1st mort. conv. east. sec. | 7 | Divers | 1861-04 | 60 | 70 | 70 |
| Do. do. | 800,000 | 2d do. convertible | 7 | March, Sept. | 1866 | 40 | 42 | 42 |
| Cincinnati, Hamilton, and Dayton | 500,000 | 1st mortgage convertible | 7 | 20, Jan., 20, July | 1867 | 94 | 96 | 96 |
| Do. do. do. | 465,000 | Do. do. | 7 | May, Novemb. | 1880 | 82 | 82 | 82 |
| Cincinnati and Marietta | 2,500,000 | 1st mortgage, conv. till 1862 | 7 | Jan'y, July | 1868 | — | — | — |
| Cincinnati, Wilmington, and Zanesville | 1,300,000 | Do. convertible | 7 | May, Novemb. | 1862 | — | — | — |
| Cleveland, Painesville, and Ashtabula | 567,000 | Do. convertible | 7 | Feby., August | 1861 | 97 | 100 | 100 |
| Cleveland and Pittsburgh | 800,000 | Do. convertible | 7 | Feby., August | 1860 | 65 | 70 | 70 |
| Do. do. | 1,200,000 | Do. on Branches | 7 | March, Sept. | 1873 | 60 | 67 | 67 |
| Cleveland and Toledo | 525,000 | Do. convertible | 7 | Feby., August | 1863 | 75 | 80 | 80 |
| Chicago and Mississippi | 800,000 | Do. conv. till 1867 | 7 | April, October | 1862-72 | 30 | 50 | 50 |
| Do. do. | 1,200,000 | Do. convertible | 7 | April, October | 1867 | 60 | 65 | 65 |
| Covington and Lexington | 400,000 | Do. do. | 6 | April, October | 1867 | 47 | 55 | 55 |
| Delaware, Lackawanna, and Western | 1,000,000 | 2d mortgage, convertible | 7 | March, Sept. | 1883 | 87 | 89 | 89 |
| Florida Freeland | 1,500,000 | 1st mortgage, do. | 7 | April, October | 1875 | 77 | 78 | 78 |
| Fort Wayne and Chicago | 1,250,000 | Do. not convertible | 7 | Jan'y, July | 1891 | 65 | 72 | 72 |
| Gales and Chicago | 2,000,000 | Do. conv. till 1868 | 7 | Feby., August | 1863 | 93 | 94 | 94 |
| Do. do. | 2,000,000 | 2d mortgage, do. | 7 | May, Novemb. | 1875 | 90 | 92 | 92 |
| Great Western (Illinois) | 1,000,000 | 1st mortgage, do. | 10 | April, October | 1868 | 84 | 88 | 88 |
| Green Bay, Milwaukee, and Chicago | 400,000 | Do. convertible | 8 | 10, April, 10, Oc. | 1863 | — | — | — |
| Jeffersonville | 300,000 | Do. 2d sec. inconv. | 7 | April, October | 1873 | — | — | — |
| Indiana Central | 600,000 | Do. convertible | 7 | May, Novemb. | 1866 | 86 | 86 | 86 |
| Indianapolis and Bellefontaine | 450,000 | Do. do. | 7 | Jan'y, July | 1860-01 | 70 | 80 | 80 |
| Indiana & Cin'ti (for Lawb. & U. M.) | 500,000 | Do. conv. till 1857 | 7 | March, Sept. | 1868 | 87 | 90 | 90 |
| La Crosse and Milwaukee | 950,000 | 1st mort. 1st sec. conv. till 1864 | 8 | May, Novemb. | 1874 | 75 | 85 | 85 |
| Lake Erie, Wabash, and St. Louis | 3,400,000 | 1st mortgage, conv. till 1859 | 7 | Feby., August | 1865 | 71 | 73 | 73 |
| Little Miami | 1,500,000 | Do. inconvert. | 6 | 2, May, 2, Nov. | 1883 | 83 | 85 | 85 |
| Michigan Central | 1,000,000 | No mortgage, convertible | 8 | April, October | 1860 | 95 | 97 | 97 |
| Do. | 600,000 | Do. do. | 8 | March, Sept. | 1869 | 92 | 93 | 93 |
| Milwaukee and Mississippi | 600,000 | 1st mort. 1st sec. conv. till 1857 | 8 | Jan'y, July | N. Y. | 1862 | 80 | 80 |
| Do. do. | 650,000 | Do. 2d do. 1858 | 8 | April, October | 1863 | 67 | 72 | 72 |
| Do. do. | 1,250,000 | Do. 3d do. 1860 | 8 | June, Decemb. | 1877 | 67 | 72 | 72 |
| New Albany and Salem | 500,000 | Do. 1st section | 10 | April, October | 1858-02 | — | — | — |
| Do. do. | 2,325,000 | Do. oth. sec. con. till 1858 | 8 | May, Novemb. | 1864-75 | 90 | 90 | 90 |
| Northern Cross. | 1,200,000 | 1st mortgage, convertible | 8 | Jan'y, July | 1873 | 75 | 75 | 75 |
| Ohio and Indiana | 1,000,000 | Do. do. | 7 | Feby., August | 1867 | 70 | 75 | 75 |
| Ohio and Pennsylvania | 1,750,000 | Do. do. | 7 | Jan'y, July | 1865-66 | 70 | 77 | 77 |
| Pennsylvania (Central) | 2,000,000 | Income, convertible | 7 | April, October | 1872 | 57 | 62 | 62 |
| Racine and Mississippi | 5,000,000 | 1st mortgage, conv. till 1860 | 7 | Jan'y, July | Phila. 1880 | 100 | 101 | 101 |
| Scioto and Hocking Valley | 680,000 | Do. conv. sinkg' f'd | 8 | Feby., August | N. Y. 1876 | — | 75 | 75 |
| Glenouville and Indiana | 300,000 | Do. 1st sec. conv. | 7 | May, Novemb. | 1861 | — | — | — |
| Pure Haute and Indianapolis | 1,500,000 | Do. convertible | 7 | Jan'y, July | 1865 | — | — | — |
| Pure Haute and Alton | 600,000 | Do. do. | 7 | March, Sept. | 1866 | — | — | — |
| Do. | 1,000,000 | Do. do. | 7 | Feby., August | 1862-72 | 68 | 72 | 72 |

| Cincinnati Stock Sales. | |
|-------------------------------------|-----------------|
| By KIRK & CHEEVER. | Per cent. |
| For the week ending April 25, 1859. | 65—84½ and int. |
| BONDS. | 75—80 |
| Do. do. 2d do. 75—80 | 10—10½ |
| Do. do. Income | 75—80 |
| Ohio & Miss., E. D., Construction | 75—80 |
| Cinc. Ham. and Dayton, 1st Mortgage | 75—80 |
| Do. do. 2d do. 75—80 | 80—85 |
| Indianap. & Cincinnati, do. do. | 75—80 |
| STOCKS. | 75—80 |
| Cincinnati, Hamilton & Dayton | 66—70 |
| Columbus and Xenia | 88—90 |
| Indianapolis & Cincinnati | 56—60 |
| Little Miami | 90—95 |
| Ohio and Mississippi (E. D.) | 75—80 |

Railroad Earnings.

Traffic of the Great Western Railroad, for the week ending April 15, 1859.

| | | |
|------------------------|----------|-----|
| Passengers | \$23,020 | 97 |
| Freight and live stock | 12,369 | 87½ |
| Mails and sundries | 1,540 | 08½ |

Total \$86,930 40

Corresponding week of last year \$53,483 84

The following is a statement of the earnings and expenses of the Connecticut River Railroad in the first quarter of 1858 and 1859:

1858. 1859.

| | | |
|--------------------|----------|----------|
| Total receipts | \$41,501 | \$49,486 |
| Operating expenses | 23,765 | 27,732 |

Net earnings \$17,736 \$21,754

Net gain in 1859 \$4,018

The receipts of the Grand Trunk Railway of Canada for the week ending April 9, were \$49,068 19

Week ending April 10, 1858 47,889 08

Increase \$1,229 11

Total traffic from July 1st \$1,769,117 22

Same period last year 1,847,962 65

Decrease \$78,845 33

The following is a comparative statement of the earnings of the Northern Central Railroad Company for the month of March.

1859. 1858. Increase.

| | | |
|------------|----------|----|
| Passengers | \$22,820 | 88 |
| Freight | 53,491 | 73 |
| Mail | 2,425 | 00 |
| Sundries | 140 | 62 |

\$78,878 23 \$66,464 18 \$12,414 05

Wilmington and Weldon Railroad.

The following is the semi-annual statement of this Company for six months ending March 31, 1859:

Gross receipts \$256,845 48

Expenditures 106,482 77

Net receipts \$150,362 71

Less interest on debt \$30,000

" Sinking fund 25,000

55,000 00

\$95,362 71

Less semi-annual div. 4 per cent. 53,200 00

Leaving a surplus of \$42,162 71

The receipts for corresponding period of last year, were \$237,675 01

And the expenditures 113,697 99

Leaving net receipts \$128,077 02

—net gain, \$26,385 69.

Virginia and Tennessee Railroad.

This road is 204 miles in length, and cost about \$7,000,000. In 1850 the taxable value of the land in the counties through which it passes, as taken from the census, was \$28,952,627; and in 1856

the value was \$32,000,000.

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Illinois and the Vice Company

the State assessment makes it \$58,917,229; or an increase in six years of \$25,365,558. This sudden increase is alone the result of an internal improvement which has cost only \$7,000,000.

American Railroad Journal.

Saturday, April 30, 1859.

Competition Between the Four Great Lines.

The recent compact between the four great railroads, has given place to an excessive competition for a business (which, unfortunately, at the present time is a very meagre one,)—to command the traffic, without any reference to the cost of transportation. The contest is for *freight* between New York and distant points in the west. Rates for passenger and local traffic of all kinds, are at present well maintained; so that the contest, as we shall hereafter show, is not so entirely destructive to the income of the several roads, as might, at first sight, be imagined.

How this matter is to end, we do not now see. We suppose it may be taken for granted that the position now assumed by the New York Central will not be receded from. This position is, as we understand it, that this company will not enter into any arrangement or agreement whereby it precludes itself from transporting merchandise over its line between New York and any points in the west, which may be said to be common to the four lines, at the same rates charged between the cities of Philadelphia and Baltimore and the same points, over their respective roads. Whatever may have been the prior agreements and understandings on this subject, and whoever may have been at fault in their rupture, the issue now presented seems reduced to the simple terms stated.

We certainly do not desire to be partial to any of the interests or parties to the present embittered controversy, although it is always difficult to escape from leaning in favor of one's neighbors, and of those with whom one comes in daily contact. But we will try to state the grounds of the action of the Central fairly, as they put it out to the public. The managers of this road deny that the Philadelphia and Baltimore, or their respective railroads as avenues of trade possess, any advantage of geographical position over New York, or its railroad for the trade of the west—They claim that two elements enter into the cost of transportation—lineal distance, and the character of the route. Practically, the shorter road is often the longer of the two. Over a level road an engine will take twice the number of cars as over a one having inclinations of 20 foot to the mile. Now we know that the disadvantages, in an economical point of view, of heavy grades are often overrated; still they are positive, and capable of being pretty accurately estimated. From the advantages, therefore, that Philadelphia and Baltimore possess on the score of proximity to the West, should be deducted the inferior character of the routes of their respective railroads. It manifestly cost more to transport merchandise for a distance of two hundred and ninety-eight miles, (the distance between Albany and Buffalo,) over the Baltimore and Ohio and Pennsylvania lines than over their New York rival. The latter has little more to do than to overcome the elevation between Albany and Buffalo. Its western termini

at Buffalo is nearly, if not quite, as high as any point on the whole road. The more southern lines, including the New York and Erie, have the Alleghany Mountains to ascend at elevations of 1,600, 1,900 and 2,600 feet above the sea level, and many hundred feet above their western *termini*. An estimate of the advantage of position, as measured by lineal distance, should certainly be qualified by a comparison of the character of the routes. Whether the assumed, (by us,) superiority of the New York Central route was taken into consideration in the late compact between the four great companies, we are not informed.

A great advantage claimed by the Central over all the competing lines is in the lesser distance by rail over it, between New York and most of the leading points in the West, than between Philadelphia and Baltimore and the same points. Take Indianapolis, for illustration. The distance between this point and New York is as follows:

| | |
|--------------------------------------|-----|
| Miles. | |
| New York to Albany by water | 150 |
| Albany to Buffalo | 298 |
| Buffalo to Toledo by water | 275 |
| Toledo to Indianapolis by rail | 223 |

Total 946

The distance from Philadelphia to the same point, all rail, is as follows:

| | |
|---------------------------------|-----|
| Miles. | |
| Philadelphia to Pittsburg | 353 |
| Pittsburg to Crestline | 187 |
| Crestline to Indianapolis | 206 |

746

The comparative statement shows a difference of 200 miles in favor of Philadelphia. But 425 miles of the N. Y. route is by water, leaving 541 as the railroad portion of the northern route, or 224 miles less than from Philadelphia. The charge for transporting merchandise from New York to Albany is \$1 per ton; from Buffalo to Toledo, the same. Allowing two cents per ton per mile for the railroad portion of the route, the total charge from New York to Indianapolis would be \$12.42 per ton. At the same rate per mile by rail, from Philadelphia to Indianapolis, 746 miles, the cost would be \$14.92 per ton. These rates may not be absolutely correct, but they are approximately so, and are put forth by the Central to show that none of the roads competing for the western trade have an advantage of position over the Central, taking New York and Philadelphia as the points.

Another motive that exerted great influence on the action of the Central, was the representation of the New York merchants. They claimed that the arrangements between the four companies were injurious to their trade. There was undoubtedly great force in their arguments. Had the discrimination been against Philadelphia and Baltimore, we think the merchants of those cities would not have been very quiet under a fancied or real loss of trade. Their respective roads were constructed expressly for the purpose of increasing it. To have them discriminating against it, and in favor of a rival, would have been a little too much for their equanimity. They must judge of New York merchants by a similar standard.

For the reasons stated, we presume the Central will not recede from the position it has taken. It claims to be in a position to maintain itself successfully in the present contest, no matter to what extent it may be carried. We see no solution of

the difficulty, unless New York, Philadelphia, and Baltimore, be placed in the same relations in reference to the western trade—or unless the four companies agree upon a geographical division of territory between them.

It is some comfort, however, to know that the competition now going on is less injurious to the interests of the companies than has generally been supposed, from the noise that has been made about it in the public press. Taking all the lines, we do not believe that one-sixth of the western business going to and from New York, is properly a subject for competition. The total amount of *through* freight traffic on all the lines for 1858, was as follows:

| | Through tonnage | Through tonnage | Receipts from thrgh |
|-------------------------|-----------------|-----------------|---------------------|
| | East. | West. | freight. |
| N. Y. Central..... | \$229,275 | \$83,133 | \$2,125,726 |
| N. Y. and Erie..... | 157,828 | 80,271 | 2,145,324 |
| Pennsylvania..... | 141,265 | 79,944 | 1,912,949 |
| Baltimore and Ohio..... | 170,084 | 54,779 | 1,678,416 |

\$698,462 \$298,127 \$7,862,415

The proportion of receipts from *through* freight to the aggregate from all sources, for the past year, was as follows:

| | Total Earnings. | Do. from |
|---------------------|-----------------|-------------|
| | through frt. | frt. |
| N. Y. Central..... | \$6,528,412 | \$2,125,726 |
| N. Y. and Erie..... | 5,151,616 | 2,145,324 |
| Penn. | 5,185,330 | 1,912,949 |
| Balt. and Ohio..... | 4,104,489 | 1,678,416 |

Totals \$20,969,847 \$7,862,415

Total *through* 7,862,415

Freight and passengers... \$13,107,432

Assuming that one-sixth of the *through* business of the respective routes are a proper subject for competition, the entire prize contended for is about \$1,300,000, or about one-sixteenth part of their entire traffic. In this point of view, although the present competition is sufficiently injurious, it is certainly not so fatal in its results as has been supposed, nor does it threaten to destroy entirely the productiveness of the competing lines.

Location of the Trunk Line of Georgia.

The line of this road has been located from Savannah to Bainbridge on Flint river. The following is a statement of the lengths of the several divisions of the road:

| | Miles. Feet. |
|--|--------------|
| The distance from Savannah to the Little Satilla river is..... | 72, |
| From the Little Satilla river to Thomasville | 126,2,240 |
| From Thomasville to Bainbridge (Flint River) | 87, 920 |

Total..... 236,3,160

Thus making the distance from Savannah to Bainbridge 236 3-5 miles nearly.

The highest elevation attained on the ridge dividing the waters of Flint and Ocklockonee rivers is 316 feet above tide water at Savannah. The ridge is eight miles east of Bainbridge. Bainbridge is 120 feet above tide water at Savannah, and the surface water of the Flint is 78 feet above the same.

San Antonio and Mexican Gulf Railroad.

This property has been transferred to the new purchasers, Messrs. J. A. Paschal, of San Antonio, J. O. Wheeler, of Victoria, and Z. K. Fulton of Lavaca—representing, besides, other parties—and they have promised to finish the road soon to Victoria, and at no distant day to San Antonio.

Savannah and Gulf Railroad.

This work is now completed to the village of Blacksley, ninety-three miles from Savannah. The road is graded for the iron some fifteen miles further on. The *Republican* thinks that the next crop of Brooks, Lowndes, Clinch, Echols and Berrien, if not Thomas, will be sent to market over this road.

We invite attention to the advertisement of Messrs. TAW & BEERS, in another column. They are the sole manufacturers of "Taw's Railroad Car Grease," and "Hinckley's Engine and Burning Oils." We have received a circular, giving a list of some twenty Companies now using their car grease—together with testimonials from the superintendents of several prominent roads at the South and West—all of whom concur in pronouncing it both economical and durable. The superintendent of the N. A. & S. R. R., says, he saves 25 per cent. on first cost, and fully 10 per cent. on stopping and wastage of the boxes. The superintendent of the M. & C. R. R. has been using the soft white grease entirely on passenger and freight cars, and finds it an excellent and cheap lubricator. The C. & S. C. company, have used the yellow grease on their road for six or eight years, and consider it the best of anything they have tried. The Master of Machinery on this road states that he has run boxes packed with it over a month at a time without heating or gumming in the least. This celebrated grease has been in use upwards of ten years, by our railroad and coal companies, mill owners, carriage builders, etc. Address Messrs. TAW & BEERS, 18 South Water street, Philadelphia, Penn.

Messrs. JAMES JEFFRIES & SONS, still continue the manufacture of *Locomotive, Car and Tank Springs* at their old stand, rear of Girard House, Philadelphia. In their advertisement in another column, reference is made to some of our most prominent railroad officers, and locomotive and car builders, as well as to all the roads where their springs are in use. Companies wishing to try their durability and elasticity, will be furnished with a set, by stating the length, width, curve over all, and the weight which they are to bear. Address Messrs. JAMES JEFFRIES & SONS, Philadelphia, Pa.

The principal "Engineer's, Architect and Draftsmen's Stationery Emporium" is to be found at No. 107 Chestnut street, Philadelphia. At this establishment pretty much everything required by the engineer in his office, by the merchant in his counting room, or by the editor in his sanctum, can be obtained at the shortest notice, and on the most reasonable terms. An advertisement, enumerating a few of the articles, may be found in its appropriate place. Orders from a distance are promptly filled, the goods packed with care, and forwarded to any part of country. Address JOSEPH HURTY, Esq., No. 107 Chestnut street, Philadelphia.

Amboy, Lansing and Traverse Bay Railroad.
We learn that the contract for building this road between Jonesville and Saginaw—including a portion of the route between Lansing and Owosso—has been taken by Messrs. Beckel and Jones. Mr. Innis still continues as chief engineer of the whole route. The work is to be commenced immediately, and completed in good running order on or before the 1st day of December next.

Albany and Susquehanna Railroad

This road is to connect with the New York and Erie at Binghamton. Work on the line was resumed last fall. Fifty-five miles were placed under contract, and the work of grading has been prosecuted on the heavier sections of the work during the past winter. Six sections, comprising about one-half the line under contract, are being worked with a daily average force of 300 men. The road is being built without any outside influence, by the inhabitants along the line; the usual appliances for getting up an impression in favor of the line have not been resorted to by the present management. The directors are mostly plain country men, who have embarked in the enterprise for the benefit of the now isolated section through which it passes. They mean to build such a line as will answer the demands of the local traffic, and accommodate such through trade as its connections with the Eastern and Western lines will bring to it.

Osage Valley and Southern Kansas R. R.

A meeting of the stockholders of this company was held in Chilton, Henry Co., Mo., on the 4th inst., at which a board of directors was elected. The board subsequently met and elected the following officers: Col. A. M. Tutt, President; Col. James M. Cogswell, Vice President; D. G. Boone, Secretary; John G. Thornton, Auditor; Dr. J. A. Rogers, Treasurer; W. A. Ela, Chief Engineer and General Land Agent.

This road will commence somewhere between Tipton and Otterville, on the Pacific road; and run thence through the counties of Morgan, Benton, Henry and Bates, to the western borders of the State. The survey has already been commenced; and it is contemplated to put the road under contract during the coming fall. This route leads directly to the best part of southern Kansas. The company are sanguine, from the liberal spirit already manifested, that stock enough will be subscribed in lands to grade the road through the State to its place of termination in Kansas.

Knightstown and Shelbyville Railroad.

We understand that this work is going forward and will soon be vigorously prosecuted to an early completion. Some delays have impeded its progress, owing to the failure of receiving the iron as was contemplated and contracted for. The company determining not to delay the work longer, have purchased a portion of the iron outside of the original contract, which is now being delivered and have assurance that the balance will be supplied in a few days, so that further detention will not occur. The bridge for Little Blue River is nearly ready to be placed upon the abutments. The contract for laying the entire line is in the hands of Messrs. Prindle & Robinson, of North Madison, aided by Samuel Higbie, of Columbus, bridge builder.

Cincinnati, Wilmington and Zanesville R.R.
A decree for the foreclosure of the mortgages on this road was taken in the U. S. Circuit Court in Cincinnati, with an accompanying argument, between all parties in interest, that all proceedings under the decree should be delayed for the term of three years and a half. This stay of proceedings under foreclosure is for the purpose of giving the stockholding organization the opportunity

to build the Glendale extension of the road and thereby secure the means to resume payment on the bonded indebtedness of the Cincinnati, Wilmington and Zanesville company. The Board is confident of being able to complete the extension within the next year, and to realize such returns as shall secure the entire line of road to the stockholders.

Railroads of Connecticut.

We give on the succeeding pages statements showing the result of the operations of the railroads of Connecticut from the opening of the first road to the present time. The aggregate result may be stated as follows: Total investment, (the cost of the several years being added together,) \$245,377,737; total earnings, \$30,536,182; expenses of operating roads, \$7,732,718; net earnings, \$12,803,464. The per centage of gross earnings to cost has been 12½ per cent.; net, do., 5¼; operating expenses, 7½.

The operating expenses are increased by the amounts paid by the New York and New Haven, and Hartford and New Haven Railroads, on the lease of the New Haven and Northampton Railroad, which have averaged, since 1849, \$33,193 over the earnings of this road. Toward this excess the Hartford and New Haven Railroad has contributed \$12,000 annually, and the New York and New Haven Railroad, \$21,193 annually. The sum charged annually to expenses has been further increased by the amount paid by the Housatonic Railroad to the Berkshire, the Stockbridge and Pittsfield, and the West Stockbridge Railroads, leased by it, and amounting to the sum of \$845,606, in the aggregate. Three-fourths of this amount has probably been lost to the Housatonic Railroad. The amount now annually paid it for its leased lines, has averaged for nine years past \$74,212. The leases are perpetual, and are the great drawback to the success of the Housatonic road.

| Year. | Length—Miles. | Cost. | Earnings. | Net Earnings. |
|------------|---------------|---------------|--------------|---------------|
| 1839..... | 18 | \$729,606 | \$31,983 | \$20,433 |
| 1840..... | 95 | 2,635,592 | 181,664 | 75,655 |
| 1841..... | 85 | 3,023,878 | 246,566 | 106,000 |
| 1842..... | 169 | 4,840,988 | 340,425 | 138,491 |
| 1843..... | 169 | 4,379,615 | 376,798 | 151,782 |
| 1844..... | 169 | 4,938,206 | 479,812 | 206,207 |
| 1845..... | 195 | 5,268,591 | 552,781 | 206,145 |
| 1846..... | 195 | 5,422,888 | 650,794 | 252,333 |
| 1847..... | 195 | 5,918,418 | 802,945 | 387,848 |
| 1848..... | 205 | 7,042,642 | 922,599 | 453,485 |
| 1849..... | 262 | 8,834,060 | 1,010,657 | 420,010 |
| 1850..... | 351 | 14,591,976 | 1,828,629 | 502,589 |
| 1851..... | 445 | 15,475,500 | 2,224,064 | 826,466 |
| 1852..... | 405 | 18,486,373 | 2,850,535 | 1,394,122 |
| 1853..... | 569 | 22,456,727 | 2,791,915 | 956,418 |
| 1854..... | 569 | 23,653,769 | 3,172,883 | 1,187,518 |
| 1855..... | 641 | 23,991,265 | 3,115,672 | 1,203,831 |
| 1856..... | 641 | 23,946,817 | 3,186,556 | 1,175,834 |
| 1857..... | 641 | 24,727,649 | 3,431,905 | 1,862,254 |
| Total..... | 6,760 | \$245,377,737 | \$30,536,182 | \$12,803,464 |

RAILROADS IN CONNECTICUT.

| Name of Road. | Length. | Cost. | Gross receipts. | Current expenses. | Net receipts. | Rec'd from pass'gers. | Rec'd from freight. | Do. Mis- cellan's. | Divid. end. |
|------------------------------------|---------|--------------|-----------------|-------------------|---------------|-----------------------|---------------------|--------------------|-------------|
| 1839. | | | | | | | | | |
| Hartford and New Haven | 18 | \$729,606 | \$81,933 | \$11,500 | \$20,433 | ..... | ..... | ..... | .. |
| 1840. | | | | | | | | | |
| Hartford and New Haven | 36 | \$851,121 | \$65,147 | \$23,152 | \$41,995 | ..... | ..... | ..... | .. |
| Norwich and Worcester | 59 | 1,777,471 | 116,547 | 52,503 | 64,014 | \$78,889 | \$28,232 | \$3,844 | .. |
| Total | 95 | \$2,628,592 | \$181,664 | \$75,655 | \$106,009 | ..... | ..... | ..... | .. |
| 1841. | | | | | | | | | |
| Hartford and New Haven | 36 | \$866,336 | \$91,305 | \$29,270 | \$62,085 | ..... | ..... | ..... | 3 |
| Norwich and Worcester | 59 | 2,157,087 | 155,261 | 78,805 | 76,456 | \$99,332 | \$52,594 | \$3,335 | .. |
| Total | 95 | \$3,023,378 | \$246,566 | \$108,075 | \$138,491 | ..... | ..... | ..... | .. |
| 1842. | | | | | | | | | |
| Hartford and New Haven | 36 | \$960,963 | \$90,760 | \$30,429 | \$60,831 | ..... | ..... | ..... | 4 |
| Norwich and Worcester | 59 | 2,158,561 | 157,358 | 75,195 | 82,163 | \$94,342 | \$50,419 | \$12,596 | .. |
| Housatonic | 74 | 1,221,460 | 92,317 | 46,158 | 46,159 | ..... | ..... | ..... | .. |
| Total | 169 | \$4,340,983 | \$340,435 | \$151,782 | \$188,653 | ..... | ..... | ..... | .. |
| 1843. | | | | | | | | | |
| Hartford and New Haven | 36 | \$969,049 | \$89,294 | \$32,808 | \$56,486 | ..... | ..... | ..... | 3 |
| Housatonic | 74 | 1,244,600 | 124,160 | 87,500 | 36,669 | ..... | ..... | ..... | .. |
| Norwich and Worcester | 59 | 2,166,566 | 162,335 | 85,899 | 76,436 | \$95,856 | \$51,102 | \$15,376 | .. |
| Total | 169 | \$4,379,615 | \$875,798 | \$206,207 | \$169,591 | ..... | ..... | ..... | .. |
| 1844. | | | | | | | | | |
| Hartford and New Haven | 36 | \$1,368,921 | \$99,632 | \$32,733 | \$66,899 | ..... | ..... | ..... | 4 |
| Housatonic | 74 | 1,398,920 | 149,506 | 93,000 | 56,506 | ..... | ..... | ..... | .. |
| Norwich and Worcester | 59 | 2,170,365 | 230,674 | 80,412 | 150,262 | \$185,654 | \$78,788 | \$16,231 | .. |
| Total | 169 | \$4,988,206 | \$479,812 | \$206,145 | \$273,667 | ..... | ..... | ..... | .. |
| 1845. | | | | | | | | | |
| Hartford and New Haven | 62 | \$1,621,720 | \$183,834 | \$62,712 | \$121,122 | ..... | ..... | ..... | 6 |
| Housatonic | 74 | 1,476,380 | 164,639 | 100,000 | 64,639 | ..... | ..... | ..... | .. |
| Norwich and Worcester | 59 | 2,170,491 | 204,308 | 89,621 | 114,687 | \$116,201 | \$77,665 | \$10,441 | .. |
| Total | 195 | \$5,268,591 | \$552,781 | \$252,333 | \$300,448 | ..... | ..... | ..... | .. |
| 1846. | | | | | | | | | |
| Hartford and New Haven | 62 | \$1,690,260 | \$228,611 | \$89,187 | \$139,424 | ..... | ..... | ..... | .. |
| Housatonic | 74 | 1,558,840 | 180,274 | 180,274 | ..... | ..... | ..... | ..... | 8 |
| Norwich and Worcester | 59 | 2,178,788 | 241,909 | 118,387 | 123,522 | \$118,909 | \$110,750 | \$12,250 | .. |
| Total | 195 | \$5,422,888 | \$650,794 | \$387,848 | \$262,946 | ..... | ..... | ..... | .. |
| 1847. | | | | | | | | | |
| Hartford and New Haven | 62 | \$2,109,865 | \$324,725 | \$130,426 | \$194,299 | ..... | ..... | ..... | 8 |
| Housatonic | 74 | 1,631,304 | 243,325 | 181,626 | 61,699 | \$90,105 | \$161,226 | \$5,627 | .. |
| Norwich and Worcester | 59 | 2,187,249 | 234,895 | 141,433 | 93,462 | 114,310 | 108,003 | 12,582 | .. |
| Total | 195 | \$5,928,418 | \$802,945 | \$453,485 | \$349,460 | \$204,415 | \$269,229 | \$18,209 | .. |
| 1848. | | | | | | | | | |
| Hartford and New Haven | 72 | \$2,354,813 | \$430,212 | \$145,668 | \$284,544 | ..... | ..... | ..... | 8 |
| Housatonic | 74 | 2,500,000 | 274,314 | 181,558 | 92,756 | \$93,322 | \$175,047 | \$5,933 | .. |
| Norwich and Worcester | 59 | 2,187,829 | 218,073 | 92,784 | 125,289 | 100,271 | 99,969 | 17,841 | .. |
| Total | 205 | \$7,042,642 | \$922,599 | \$420,010 | \$502,589 | \$193,593 | \$225,006 | \$23,773 | .. |
| 1849. | | | | | | | | | |
| Hartford and New Haven | 72 | \$2,405,813 | \$482,803 | \$142,401 | \$290,402 | ..... | ..... | ..... | 8 |
| Housatonic | 74 | 2,500,000 | 287,184 | 176,797 | 110,387 | \$111,322 | \$165,394 | \$10,278 | .. |
| Naugatuck | 57 | 1,333,249 | 54,473 | 25,170 | 29,303 | 22,129 | 31,146 | 1,197 | .. |
| Norwich and Worcester | 59 | 2,095,508 | 236,197 | 114,869 | 121,328 | 104,398 | 114,144 | 17,654 | .. |
| Total | 262 | \$8,834,060 | \$1,010,657 | \$459,237 | \$551,420 | \$237,849 | \$810,684 | \$29,129 | .. |
| 1850. | | | | | | | | | |
| Hartford and New Haven | 72 | \$2,631,541 | \$490,930 | \$196,454 | \$294,476 | ..... | ..... | ..... | 10 |
| Housatonic | 74 | 2,500,000 | 310,063 | 261,569 | 48,494 | \$126,988 | \$170,080 | \$12,991 | 4 |
| Naugatuck | 57 | 1,335,000 | 230,862 | 136,273 | 94,589 | 94,735 | 130,259 | 5,868 | .. |
| New Haven and Northampton | 27 | 750,000 | 76,453 | 40,000 | 36,463 | ..... | ..... | ..... | .. |
| New London, Willimantic and Palmer | 66 | 1,335,000 | 80,900 | 40,700 | 40,200 | 54,000 | 25,400 | 1,500 | 4 |
| New York and New Haven | 62 | 3,441,920 | 378,162 | 199,748 | 178,414 | 354,484 | 9,649 | 14,029 | 7 |
| Norwich and Worcester | 59 | 2,598,514 | 261,259 | 126,313 | 133,946 | 110,109 | 134,382 | 16,766 | 2½ |
| Total | 417 | \$14,591,975 | \$1,828,629 | \$1,002,059 | \$826,572 | \$740,316 | \$469,770 | \$51,154 | .. |
| 1851. | | | | | | | | | |
| Hartford and New Haven | 72 | \$2,742,245 | \$556,004 | \$235,011 | \$320,993 | ..... | ..... | ..... | 10 |
| Housatonic | 74 | 2,500,000 | 329,041 | 240,227 | 88,814 | \$130,428 | \$183,786 | \$14,884 | .. |
| Naugatuck | 57 | 1,368,151 | 190,227 | 85,287 | 104,940 | 72,307 | 114,052 | 3,867 | .. |
| New Haven and Northampton | 55 | 1,400,000 | 120,380 | 50,148 | 70,282 | ..... | ..... | ..... | 4 |
| New London, Willimantic and Palmer | 66 | 1,450,000 | 111,057 | 56,197 | 54,860 | 60,643 | 37,966 | 2,448 | .. |
| New York and New Haven | 62 | 3,700,000 | 647,306 | 388,661 | 258,645 | 564,355 | 71,266 | 11,685 | 7 |
| Norwich and Worcester | 59 | 2,585,104 | 270,049 | 138,550 | 181,499 | 117,606 | 137,573 | 14,870 | 4 |
| Total | 445 | \$15,745,500 | \$2,224,064 | \$1,194,081 | \$1,029,983 | \$945,839 | \$543,643 | \$47,704 | .. |

| | | | | | | | | | |
|------------------------------------|-----|--------------|-------------|-------------|-------------|-------------|-------------|-----------|-------|
| 1852. | | | | | | | | | |
| Hartford and New Haven | 72 | \$2,906,589 | \$600,408 | \$268,185 | \$332,223 | \$396,383 | \$172,547 | \$31,478 | 10 |
| Housatonic | 74 | 2,500,000 | 301,166 | 301,166 | 70,232 | 94,148 | 178,894 | 14,741 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 120,380 | 50,148 | 70,232 | 94,148 | 178,894 | 14,741 | 5 |
| Naugatuck | 57 | 1,409,508 | 210,984 | 95,208 | 115,781 | 79,641 | 127,071 | 4,272 | 7 |
| New York and New Haven | 62 | 4,800,000 | 679,653 | 424,899 | 254,754 | 555,215 | 118,005 | 11,433 | 7 |
| New London, Willimantic and Palmer | 66 | 1,511,111 | 114,410 | 62,509 | 51,901 | 61,609 | 44,238 | 8,564 | 5 |
| New Haven and New London | 50 | 1,362,677 | 55,973 | 35,266 | 20,707 | 52,512 | 2,522 | 939 | 5 |
| Norwich and Worcester | 59 | 2,596,488 | 267,561 | 156,746 | 110,815 | 112,933 | 139,009 | 15,618 | 4 |
| Total | 495 | \$18,486,373 | \$2,350,535 | \$1,394,122 | \$956,413 | \$1,352,439 | \$777,286 | \$87,047 | |
| 1853. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$369,738 | \$48,830 | \$28,157 | \$20,673 | \$28,758 | \$17,772 | \$2,300 | 6 |
| Hartford and New Haven | 72 | 3,164,833 | 639,528 | 304,180 | 335,348 | 405,173 | 200,154 | 34,201 | 10 |
| Hartford, Providence and Fishkill | 50 | 3,008,214 | 98,941 | 40,251 | 58,690 | ..... | ..... | ..... | .. |
| Housatonic | 74 | 2,507,819 | 324,990 | 820,359 | 4,631 | 103,861 | 207,402 | 13,727 | 5 |
| Naugatuck | 57 | 1,530,907 | 246,687 | 122,059 | 124,628 | 91,467 | 150,686 | 4,534 | 8 |
| New Haven and Northampton | 55 | 1,400,000 | 147,606 | 51,457 | 96,149 | ..... | ..... | ..... | 4 |
| New Haven and New London | 50 | 1,375,912 | 96,138 | 56,463 | 39,675 | 88,000 | 6,000 | 2,188 | 5 |
| New York and New Haven | 62 | 4,978,487 | 729,434 | 437,826 | 301,608 | 610,550 | 108,877 | 20,007 | 5 |
| New London, Willimantic and Palmer | 66 | 1,524,329 | 128,715 | 73,821 | 54,894 | 64,097 | 57,164 | 7,454 | 5 |
| Norwich and Worcester | 59 | 2,596,488 | 321,046 | 169,824 | 151,222 | 188,294 | 159,326 | 23,426 | 4 |
| Total | 569 | \$22,456,727 | \$2,791,915 | \$1,604,397 | \$1,187,518 | \$1,530,200 | \$907,381 | \$107,787 | |
| 1854. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$371,504 | \$48,664 | \$35,653 | \$13,011 | \$28,758 | \$17,628 | \$2,378 | 5 |
| Hartford and New Haven | 72 | 3,339,866 | 757,651 | 398,760 | 358,891 | 476,174 | 243,643 | 37,834 | 10 |
| Hartford, Providence and Fishkill | 50 | 3,751,726 | 179,048 | 63,550 | 115,498 | 98,031 | 72,314 | 8,703 | 5 |
| Housatonic | 74 | 2,507,819 | 330,792 | 300,408 | 30,384 | 108,521 | 207,793 | 14,478 | 5 |
| Naugatuck | 57 | 1,577,167 | 269,743 | 269,743 | ..... | 99,971 | 164,821 | 4,952 | 4 |
| New Haven and New London | 50 | 1,450,384 | 103,986 | 59,618 | 44,368 | 87,607 | 9,326 | 7,063 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 147,606 | 56,200 | 91,406 | ..... | ..... | ..... | 4 |
| New London, Willimantic and Palmer | 66 | 1,527,827 | 137,066 | 65,357 | 71,709 | 63,831 | 63,896 | 10,089 | 5 |
| New York and New Haven | 62 | 5,131,488 | 875,523 | 528,512 | 347,011 | 716,436 | 127,340 | 31,749 | 5 |
| Norwich and Worcester | 59 | 2,596,488 | 322,754 | 191,201 | 131,553 | 138,374 | 161,268 | 23,112 | 6 |
| Total | 569 | \$23,653,769 | \$3,172,833 | \$1,969,002 | \$1,203,831 | \$1,817,203 | \$1,067,829 | \$140,298 | |
| 1855. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$373,460 | \$54,241 | \$34,340 | \$19,901 | \$28,816 | \$25,270 | \$2,155 | 5 |
| Hartford and New Haven | 72 | 3,565,018 | 730,012 | 377,213 | 352,799 | 444,239 | 250,039 | 35,724 | 10 |
| Hartford, Providence and Fishkill | 122 | 3,936,734 | 258,685 | 139,074 | 119,611 | 166,626 | 82,224 | 9,885 | 5 |
| Housatonic | 74 | 2,507,819 | 339,196 | 239,371 | 99,825 | 110,461 | 215,424 | 13,312 | 5 |
| Naugatuck | 57 | 1,580,723 | 188,982 | 124,508 | 63,979 | 70,680 | 112,967 | 5,335 | 5 |
| New Haven and New London | 50 | 1,455,569 | 88,007 | 57,688 | 30,319 | 70,208 | 11,061 | 6,738 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 147,606 | 62,460 | 88,146 | ..... | ..... | ..... | 4 |
| New London, Willimantic and Palmer | 66 | 1,594,382 | 124,043 | 57,712 | 66,331 | 58,099 | 55,641 | 13,303 | 5 |
| New York and New Haven | 62 | 4,980,407 | 882,742 | 571,584 | 311,158 | 685,056 | 131,217 | 66,469 | 5 |
| Norwich and Worcester | 59 | 2,597,153 | 304,235 | 215,777 | 88,381 | 125,998 | 155,592 | 22,645 | 2 1/2 |
| Total | 641 | \$23,991,265 | \$3,115,749 | \$1,877,722 | \$1,238,027 | \$1,760,183 | \$1,039,433 | \$175,526 | |
| 1856. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$377,460 | \$61,134 | \$35,098 | \$26,036 | \$30,852 | \$27,936 | \$2,346 | 3 |
| Hartford and New Haven | 72 | 3,329,337 | 730,794 | 393,555 | 337,239 | 430,447 | 264,667 | 35,670 | 15 |
| Hartford, Providence and Fishkill | 122 | 4,030,349 | 340,586 | 171,160 | 169,426 | 190,555 | 137,301 | 12,730 | 5 |
| Housatonic | 72 | 2,507,819 | 329,297 | 256,870 | 72,427 | 104,687 | 207,861 | 16,799 | 5 |
| Naugatuck | 57 | 1,576,926 | 237,416 | 109,848 | 127,568 | 84,866 | 146,828 | 6,722 | 5 |
| New Haven and New London | 50 | 1,455,040 | 88,007 | 57,688 | 30,319 | 70,208 | 11,061 | 6,738 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 173,954 | 81,427 | 92,527 | ..... | ..... | ..... | 4 |
| New London, Willimantic and Palmer | 66 | 1,603,230 | 120,571 | 98,731 | 26,840 | 51,522 | 59,559 | 9,490 | 5 |
| New York and New Haven | 62 | 5,070,979 | 881,394 | 577,649 | 303,745 | 685,064 | 152,048 | 44,282 | 5 |
| Norwich and Worcester | 59 | 2,598,677 | 323,402 | 233,695 | 89,707 | 134,197 | 170,851 | 18,854 | 5 |
| Total | 641 | \$23,949,817 | \$3,186,555 | \$2,010,721 | \$1,175,834 | \$1,748,248 | \$1,106,257 | \$153,641 | |
| 1857. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$383,010 | \$61,544 | \$34,532 | \$27,012 | \$28,439 | \$30,379 | \$2,726 | 6 |
| Hartford and New Haven | 72 | 3,773,547 | 769,065 | 372,807 | 396,258 | 455,036 | 274,662 | 39,367 | 10 |
| Hartford, Providence and Fishkill | 122 | 4,123,964 | 367,894 | 201,732 | 166,162 | 206,563 | 148,377 | 12,954 | 5 |
| Housatonic | 72 | 2,628,820 | 318,475 | 284,556 | 33,919 | 102,860 | 196,114 | 19,501 | 5 |
| New Haven and New London | 50 | 1,454,040 | 157,657 | 109,985 | 47,722 | 126,842 | 18,136 | 12,679 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 172,368 | 82,081 | 90,287 | ..... | ..... | ..... | 5 |
| New London, Willimantic and Palmer | 66 | 1,603,230 | 115,803 | 77,541 | 38,262 | 50,999 | 54,976 | 9,828 | 5 |
| Naugatuck | 57 | 1,578,301 | 209,555 | 119,222 | 90,333 | 78,187 | 119,606 | 11,761 | 5 |
| New York and New Haven | 62 | 5,170,915 | 971,708 | 569,744 | 401,964 | 749,324 | 175,987 | 46,447 | 3 |
| Norwich and Worcester | 59 | 2,616,811 | 287,756 | 248,139 | 44,617 | 124,554 | 150,328 | 12,874 | 5 |
| Total | 641 | \$24,727,688 | \$3,431,905 | \$2,095,289 | \$1,336,536 | \$1,922,804 | \$1,168,515 | \$168,137 | |
| 1858. | | | | | | | | | |
| Danbury and Norwalk | 24 | \$383,010 | \$61,544 | \$34,532 | \$27,012 | \$28,439 | \$30,379 | \$2,726 | 5 |
| Hartford and New Haven | 72 | 3,773,597 | 628,845 | 306,854 | 321,391 | 371,906 | 215,557 | 40,782 | 10 |
| Hartford, Providence and Fishkill | 122 | 4,119,431 | 273,427 | 161,102 | 112,325 | ..... | ..... | ..... | 5 |
| Housatonic | 74 | 2,555,837 | 271,918 | 204,135 | 67,923 | 90,929 | 158,918 | 21,426 | 5 |
| New Haven and New London | 50 | 1,473,817 | 76,758 | 66,548 | 10,210 | 59,970 | 8,823 | 7,960 | 5 |
| New Haven and Northampton | 55 | 1,400,000 | 156,057 | 75,707 | 80,350 | ..... | ..... | ..... | 4 |
| New London, Willimantic and Palmer | 66 | 1,603,230 | 115,803 | 77,541 | 38,262 | 50,999 | 55,976 | 9,990 | 5 |
| Naugatuck | 57 | 1,578,301 | 209,555 | 119,222 | 90,333 | 78,187 | 119,606 | 5,722 | 5 |
| New York and New Haven | 62 | 5,258,232 | 855,994 | 628,425 | 231,569 | 628,149 | 138,084 | 58,761 | 5 |
| Norwich and Worcester | 59 | 2,618,694 | 183,187 | 183,189 | 100,367 | 111,230 | 157,871 | 14,455 | 5 |
| Total | 641 | \$24,758,649 | \$2,882,090 | \$1,852,254 | \$979,836 | \$1,414,809 | \$691,214 | \$156,472 | |

Maryland Institute.

The annual meeting of the Maryland Institute for the election of officers, was held on the 20th inst., at the Institute Building, and was quite numerously attended. The election resulted as follows:—President, Samuel Sands; Vice President, John F. Meredith and James M. Anderson; Recording Secretary, G. H. Hunt; Corresponding Secretary, S. Morris Cochrane; Treasurer, Hugh Bolton. Board of Managers, William Keyser, Thomas Trimble, S. S. Mills, Thomas J. Lovegrove, John Jones, W. W. Maughlin, J. Mowton Saunders, N. H. Thayer, Ezra Whitman, C. W. Bentley, James McNab, D. L. Bartlett, J. Crawford Neilson, Adam Donmead, William H. Young, V. O. Bareckson, Samuel Hindes, James Stirrat, John H. Tegmeyer, W. Henry Johnson, Abram G. Mott, George H. Rogers, Thomas Stow, James Young.

From the report of the Committee on Finance the following extract is taken:

| On account of | Total | Amount |
|----------------------------|-------------|-------------|
| Receipts. | Paid. | |
| Exhibition | \$8,018 83 | \$4,863 27 |
| Library | 275 95 | 1,421 83 |
| Male school | 617 00 | 3,576 28 |
| Female school dept' | 383 24 | 1,048 95 |
| Hall | 3,037 23 | 3,584 66 |
| Chemical | 5 25 | 920 15 |
| Lecture department | 132 50 | 660 58 |
| Education | 124 00 | 158 44 |
| Miscellaneous | 12,662 00 | 9,039 39 |
| Total | \$25,256 00 | \$25,273 54 |
| On account of. | Amount | Amount |
| against | On account | On account |
| Institute. | in favor | preceding |
| | Institute. | years. |
| Exhibition | \$8,155 56 | \$..... |
| Library | 444 50 | 701 37 |
| Male school | 1,352 53 | 1,606 75 |
| Female do | 601 97 | 63 74 |
| Hall | 96 01 | 451 42 |
| Chemical | 467 61 | 447 29 |
| Lecture dept | 404 19 | 123 89 |
| Education | 5 06 | 39 50 |
| Miscellaneous | 3,622 61 | 1,247 44 |
| Total | \$8,366 81 | \$6,783 23 |
| | | \$4,681 40 |
| | | 3,866 81 |
| Leaving in favor of the In | | |
| Institute | | \$3,416 42 |

Long Island Railroad.

The Long Island railroad commences at Jamaica, and extends, via Hempstead, Hicksville, Farmingdale, and River Head, to Greenport, on the eastern end of Long Island, a distance of 84 miles. The Brooklyn and Jamaica railroad, which is leased and operated by the Long Island company, and by which they reach their present terminus at South Ferry, Brooklyn, is 11 miles in length—making a total of 95 miles. By the terms of this lease, 11 per cent. of the gross receipts of both roads are paid to the Brooklyn and Jamaica company as rent, with a proviso that the amount shall not be less than \$21,000, nor greater than \$33,300 in any one year. The maximum has been reached, and will doubtless so continue.

The company have determined to change the terminus of the road from Atlantic street, Brooklyn, to Hunter's Point, which will be effected during the present year. This new route will be furnished as follows: The Flushing railroad, eight miles in length, extending from Hunter's Point, to Flushing, is to be purchased. A new road is to be built, diverging from the Flushing road at Winfield, (8.65 miles from Hunter's Point,) to the Brooklyn and Jamaica railroad, three-fourths of a mile west of Jamaica—and both the Flushing road and the new road, together with the right of

way for two tracks over the Brooklyn and Jamaica road, from the end of the new road to Jamaica, to be conveyed to the Long Island railroad company—together with half the equipment now on the Flushing road—for the sum of \$337,000, payable \$62,000 in cash, and \$275,000 in 7 per cent. mortgage bonds on the Flushing and new road, having 30 years to run, interest and principal payable by the Long Island railroad company. By the new route, the distance by rail will be lessened 1.49 miles. The distance by boat from Hunter's Point to Fulton street New York, is about four miles—being an increase of three miles over the present ferryage.

In order to do this the company require to be relieved of their present lease of the Brooklyn and Jamaica road, and the depot grounds at South Ferry. This done, the annual saving in rent, depot expenses, flagman and horses will be \$37,800—sufficient to pay interest on the cost of the new road, wages of flag and draw bridge men, amounting in all to \$28,840—leaving a balance annually of \$10,960. The receipts of the Flushing road have been about \$40,000 per annum; the operating expenses \$20,000; and the ferry expenses \$20,000—leaving no surplus, but contributing \$20,000 towards sustaining the ferry. If to this be added the \$10,960, and \$12,000 additional which will be contributed to it by the Long Island railroad, will make a total ferry fund of \$42,960.

In the report of the company for the fiscal year ending March 31, 1859 the following statement is made of the receipts, expenditures and net earnings, viz:

| Receipts: | |
|--------------------------|--------------|
| From passengers | \$189,988 36 |
| " freight | 140,054 47 |
| " mails | 8,225 00 |
| " unloading freight, etc | 5,770 30 |

| Expenses: | |
|-------------------------|--------------|
| Operating road | \$180,514 57 |
| Interest paid | 32,920 00 |
| Rent of Brooklyn and | |
| Jamaica and Cold Spring | |
| Branch roads, and depot | |
| at South Ferry | 41,334 62 |
| Equipment | 658 00 |
| | 255,427 19 |

Net surplus \$78,610 94

The receipts show an increase, as compared with the previous year, of \$8,725—the difference being made up wholly from an increase of freight business. The expenses were less by \$18,699 81; and the net surplus \$12,424 81 more. This surplus is greater than that of any previous year. The report speaks most encouragingly of the freight business. The total receipts from business connected with the dairy alone yielding \$18,513.49. There is also a steadily increased freightage from vegetables and fruit.

The company have 19 locomotives, 34 passengers, 4 mail, 3 horse, and 156 freight cars, with 16 crates and 6 snow ploughs. The value of the company's property exclusive of wood, cross-ties and depot lots, is given at \$227,885 75.

The capital stock of the company is 66,000 shares—the par value of which is \$3,000,000.

The funded debt, consisting of mortgage bonds of 1850, due in 1870, is \$500,000. The other liabilities of the company amount to \$144,566 07—making a total of \$8,644,566 07. The total re-

ceipts during the year, including balance from previous year, were \$340,227 65; and the disbursements \$282,817 51—leaving a balance of cash on hand April 1, 1859, of \$57,410 14.

The officers are—W. E. MORRIS, President and Superintendent; W. S. S. RUSSELL, Secretary and Treasurer.

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1m15

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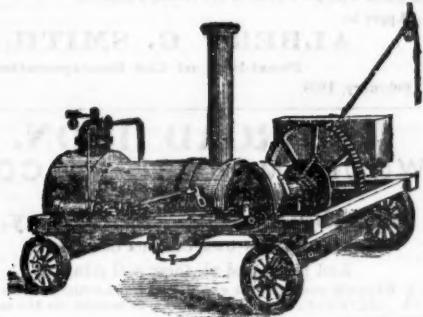
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New York, Aug. 1, 1858.

9 South William Street.

RAILROAD IRON.
The subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.
Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

RAILROAD IRON.
The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, are prepared to contract for delivery on board ship at Liverpool, or Welsh port,
G. CONGREVE & SON,
18 Cliff st., N. Y.

RAILROAD IRON.
CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT, OR at a Port in United States, WILL BE MADE BY THE UNDERSIGNED, THEODORE DEHON,
10 Wall st., near Broadway, New York.
500 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.
WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
6m35 BALTIMORE.
And 17 Nassau st., NEW YORK.

IRON BOILER FLUES.
Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.
Wrought Iron Welded Tubes, From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.
MANUFACTURED AND FOR SALE BY MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.
Warehouse—209 South Third st., PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN F. M. TASKER.

RAILROAD IRON AND COMMON BARS.
THE UNDERSIGNED,
Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Dowlais Iron Works,
New Cardiff, South Wales,
ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.
BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854.

1y23

American Railroad Iron.
The Undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.

JAMES HENDERSON,
18 Cliff st., NEW YORK.

RAILROAD IRON.
The Crescent Manufacturing Company, WHEELING, VA.

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address N. WILKINSON, Secy., WHEELING, VA.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO,
MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited from Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.
Apply to

ALBERT G. SMITH,
President of the Incorporation.
February, 1858.

RAILROAD IRON.
WOOD, MORRELL & CO.,
Having leased the extensive Works of the Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,
And purchased all their real estate,
A RE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
Philadelphia Office, { North Penna. R. R. Building,
No. 407 Walnut st.

THE ROUND OAK IRON WORKS,
STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.
6m35 And 17 Nassau Street, NEW YORK.

RAILROAD IRON.
THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
New York Agency:
BUNNING, CROCKER & DODGE,
32 Cliff st.

LACKAWANNA IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

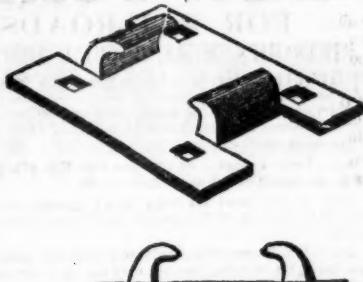
Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,
SCRANTON, PA.,
or THEO. STURGES, Treasurer,
46 Exchange Place,
NEW YORK.

**NEW YORK
RAILROAD CHAIR WORKS.**
J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late New York Wrought Iron Railroad Chair Company, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

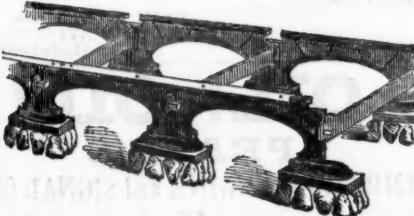
Messrs. M. K. JESUP & CO., 44 Exchange Place, New York, are the only parties authorized to act as our Agents.

**BEERS'
CAST-IRON ENDLESS RAIL,
FOR CITY RAILROAD;**

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs per yard; Durably four-fold over the present roads, with 65 lbs. groove rail: And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.

Also,—



**BEERS'
ELASTIC IRON RAILWAY,
FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled Railroads, their construction and management, with the remarks, from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The under-signed is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

**GEO. M. FREEMAN,
SUCCESSOR TO
PRATT & FREEMAN,
PHILADELPHIA
RAILWAY SUPPLY AGENCY,
No. 183 WALNUT STREET,
PHILADELPHIA.**

Railroad Materials, Locomotive and Car Findings, MACHINERY AND MACHINISTS' TOOLS, MINERS' TOOLS, ETC.

COTTON WASTE.

WHITE AND YELLOW CAR GREASE, LOCOMOTIVE BRASS WORK, Baggage Checks, Barrows, etc., etc.

RAILROAD LANTERNS, SIGNAL LIGHTS, STEAM GAUGES, COCKS AND WHISTLES, INDIA RUBBER HOSE PACKINGS, ETC.

LANTERNS OF ALL DESCRIPTIONS, ENGINE, STATION, AND SIGNAL BELLS,

Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with despatch and care at the manufacturers' lowest prices.

**HOLT, GILSON & CO.,
MANUFACTURERS AND DEALERS**

**IN
RAILROAD & STEAMBOAT
SUPPLIES,**

5 WATER ST., BOSTON.
LOCOMOTIVES AND CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

BOILER TUBES AND FELTING.

BOLTS, NUTS & WASHERS.

CAR, SHIP AND BRIDGE BOLTS.

Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions. Steam and Water Gauges; Signal Bells, etc., etc.

AGENTS FOR CAR HEAD LININGS.

Sole Agents for TOMEY'S celebrated GAUGE GLASSES, and PACKER'S IMPROVED RATCHET DRILL.

Orders filled with despatch and at the lowest prices.

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**GILBERT, MURDOCK & CO.,
No. 9 NASSAU STREET,
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ARE agents for, and prepared to furnish at manufacturers' prices,

**RAILROAD IRON,
LOCOMOTIVE ENGINES,
RAILROAD CARS,
CAR WHEELS,
AXLES, CHAIRS,
SPIKES, TOOLS,
ETC., ETC.**

All inquiries in reference to the above articles will receive immediate attention.

NEW YORK, January, 1859.

**S. B. BOWLES,
MANUFACTURER AND DEALER IN
RAILROAD
SUPPLIES,**

No. 12 GOLD STREET,
(Between PLATT and MAIDEN LANE),

NEW YORK.

RAILROAD SUPPLIES.

**WILLIAMS & PAGE,
No. 44 Water, between Congress and Kilby Streets,**

BOSTON, MASS.

**IRON RAILS, CHAIRS, & SPIKES,
FREIGHT AND COAL CARS,
(on hand or made at short notice.)**

**WHEELS AND AXLES OF ALL KINDS,
LOWMOOR, AMES, BOWLING AND NASHUA TIRES,
IRON AND STEEL,
OF all kinds for Shops and Tracks.**

Car Trimmings, Paints, Oil, Varnish, Car and Switch Locks, Ventilators, Lanters, Head-Lights, Gauges, Rubber Springs, Chairs, Hose and Belting, Ash, Pine and other Timber, and all MATERIALS USED in Equipment and Repairs of Railroads, Engines and Cars, at lowest prices.

**THOS. S. WILLIAMS, PHILIP S. PAGE,
Late Supt Boston & Maine R. R. Late PAGE, ALDEN & CO.**

REFERENCES.

JAMES HAYWARD, President PHILIPS, DODGE & CO., N. Y.
Boston and Maine R. R. COOPER, HEWITT & CO., do.
Capt. WM. H. SWIFT, Boston, REEVES, BUCK & CO., Phila.
LAWRENCE, STONE & CO., do. E. S. CHESBROUGH, Chicago.
S. M. FELTON, Pres't Phila., W. & B. R. R.

**A. BRIDGES & CO.,
MANUFACTURERS AND DEALERS IN
RAILROAD AND CAR
FINDINGS,
OF EVERY DESCRIPTION,
64 COURTLANDT ST., NEW YORK.**

**RAILROAD AXLES, WHEELS AND CHAIRS,
SPIKES, BOLTS,
NUTS, WASHERS,
CAR, SHIP AND BRIDGE BOLTS.**

IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.

STEEL AND RUBBER SPRINGS,

LOCOMOTIVE AND HAND LANTERNS,

PORTABLE FORGES AND JACK SCREWS,

COTTON DUCK FOR CAR COVERS,

BRASS AND SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Linings. Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES. JOEL C. LANE.

MORRIS K. JESUP. JOHN KENNEDY. GILDED A. SMITH.

**M. K. JESUP & CO.,
RAILWAY AGENTS AND BANKERS,
44 EXCHANGE PLACE,
NEW YORK,**

AGENTS FOR THE SALE OF
FOREIGN AND AMERICAN RAILROAD IRON

AND ALL MATERIALS NECESSARY FOR THE

Construction, Equipment & Operating of Railways.

RAILWAY AND OTHER SECURITIES

BOUGHT AND SOLD

Either privately or at the Board of Brokers.

**A. S. & A. G. WHITON
72 PINE ST., NEW YORK,
DEALERS IN**

**RAILROAD IRON,
CHAIRS AND SPIKES,
LOCOMOTIVES,
PASSENGER AND FREIGHT CARS.**

MANUFACTURERS' AGENTS

FOR Geller's Iron Turn Tables, Dinger's Patent Blower,

Gardiner's Volute Car Springs and

RAILWAY SUPPLIES GENERALLY.

ALSO MANUFACTURERS OF
NEGOTIATORS OF SECURITIES.

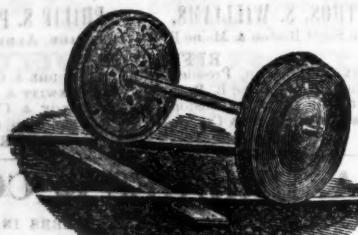
RAILROAD IRON.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other market towns.
CASWELL & PERKINS,
Brokers, 69 Wall St.
NEW YORK, January 1, 1850.

Boston Locomotive Works,
Late Hinkley & Drury,
No. 380 HARRISON AVENUE,
BOSTON.

LOCOMOTIVE AND STATIONARY
STEAM ENGINES;
BOILERS;
Iron, Brass, Copper and Composition Castings;
COPPERSMITH'S WORK,
AND ALL KINDS OF RAILROAD MACHINERY
FURNISHED AT SHORT NOTICE.

ALSO



**VAN KURAN'S IMPROVED
RAILROAD WHEEL,**
PATENTED MAY 1, 1849.

Manufactured under the Personal Superintendence
of the PATENTEE, as above.



ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

Address DANIEL F. CHILD,
Treasurer, BOSTON.

**THE JERSEY CITY
LOCOMOTIVE WORKS,**
SUCCESSORS TO
BREESE, KNEELAND & CO.,
JERSEY CITY, N. J.

MANUFACTURE COAL or WOOD BURNING
LOCOMOTIVES, Steam Fire Engines, Portable ENGINES and BOILERS, Cast Steel SPRINGS for Engines, Tenders, Passenger or Freight Cars; SHAFTING and ALL KINDS of RAILWAY MACHINERY.

They also furnish to order TYRES, DRIVING WHEELS and AXLES, CASTINGS and FORGINGS.

Boiler Work furnished with dispatch.
G. M. WHEELER,
PRESIDENT.
W. G. HAMILTON, V. P. & Eng'r.
OFFICE IN NEW YORK—49 WILLIAM ST.

UNION WORKS, BALTIMORE.
POOLE & HUNT,
Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES, equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flour and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFTING, PULLING and HANGERS.

RECOMMENDED TO SHOTADOWNERS

THE ROGERS
Locomotive & Machine

WORKS,

SUCCESSIONS TO

ROGERS, KETCHUM & GROSVENOR,

PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish promptly of the best and most improved description, either

COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

J. S. ROGERS, Pres't, { Paterson, N. J.

WM. S. HUDSON, Sup't, {

M. K. JESUP, Vice Pres't.

L. P. STARR, Sec'y and Treas'r.

44 Exchange Place, New York.

Locomotive Engines.**DANFORTH, COOK & CO.,**
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HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for furnishing Repair Shops.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention.

1849

THE SCHENECTADY
LOCOMOTIVE WORKS,
SCHEECTADY, N. Y.,

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,
either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the Building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

RICHARD NORRIS, HENRY LATIMER NORRIS,
RICHARD NORRIS & SON,LOCOMOTIVE STEAM ENGINE
BUILDERS,
SEVENTEENTH STREET, ABOVE CALLOWHILL,PHILADELPHIA,
ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF**LOCOMOTIVES,
RAILWAY TOOLS AND
MACHINERY.**

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

WEST POINT FOUNDRY.

R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon, WATER PIPES, BOILERS, IRON BUILDINGS,

CASTINGS & FORGINGS OF ALL KINDS.

WM. KEMBLE, Agents

CHAS. J. NOURSE, 26 Broadway.

MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

PETER COOPER,

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THE IMPERIAL
LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON,) 108, 110, 112, 114, 116 and 118 CHURCH ST.,

NEW YORK.

FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:

1st. Its first cost is vastly less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—
J. C. HULL & SONS'
REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is believed that it will be found the

CHEAPEST, CLEANEST AND BEST
OIL FOR BURNING,

(all things considered), in the market.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,
DEALERS IN**Sperm, Whale and Elephant Oils,**
Adamantine Car and other Candles,AND MANUFACTURERS OF
**TAW'S LUBRICATING
GREASE**FOR RAILROAD CARS
AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years; and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.
Parties ordering, will please state the kind of box, or description of machinery.TAW & BEERS,
18 SOUTH WATER ST.,
Philadelphia.**OIL! OIL!**
PEASE'S
IMPROVED ENGINE and SIGNAL OIL,FOR
RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main St., BUFFALO.
Reliable orders filled for any part of the United States or Europe.